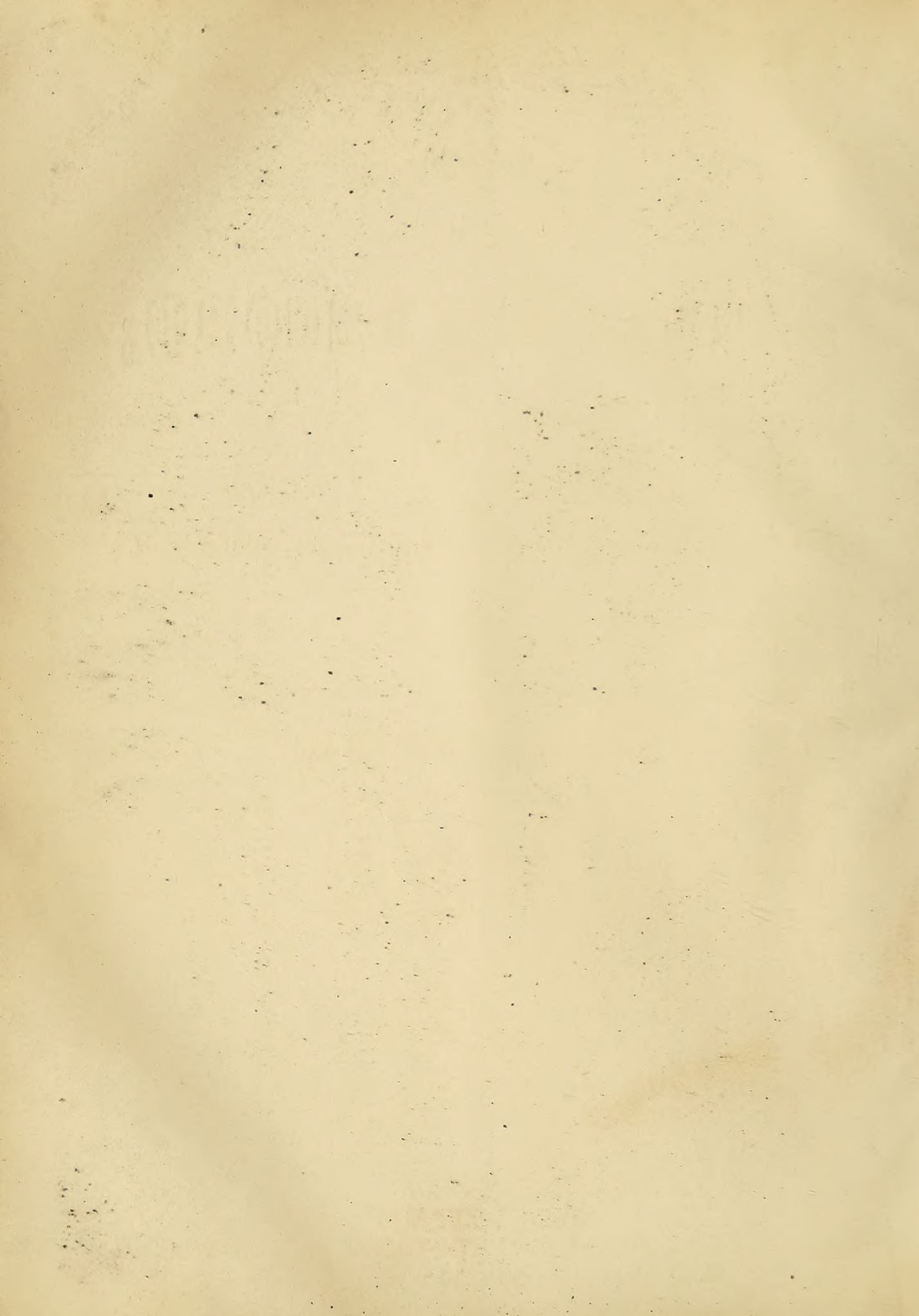


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THE
RAILROAD RECORD;

AND

Journal of Commerce, Banking, Manufactures and Statistics

EDITED BY

E. D. MANSFIELD & T. WRIGHTSON,

VOL. X.

CINCINNATI:

WRIGHTSON & CO., PRINTERS AND PUBLISHERS, 167 WALNUT STREET.

1862-63

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1892-93

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The Railroad Record is a weekly paper of sixteen large quarto pages, devoted to the interests of RAILROADS and statistics of the growth and development of the country, and especially of the West. Established at about the period of the practical commencement of the Railroad system of the West, it has contained a complete history of all the great enterprises that have been begun and completed in the Western States. This history is continued from year to year by the publication of the Annual Reports of the roads, statistics of the productions of the country through which they pass and such other information as may from time to time be gathered, showing the resources of the country to furnish business for the roads. The bound volumes of the R. R. RECORD contain more information concerning the Railroads of the country than can be obtained from any other source.

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, FEBRUARY 20, 1862.

RAILROADS OF THE WORLD.

We find in the London *Engineer* a very elaborate statement of the railroads of the world, arranged from the latest authorities that could be obtained. As it is a matter of great interest to our readers we need offer no apology for transferring it to our columns. From this statement it would seem that the total number of miles of railroad now in operation in the whole world is in round numbers 70,000. Of this whole amount the United States contain forty-four per cent. or nearly one half. This in our young country, its giant resources but just beginning to be developed, is a statement that may well astonish old Europe and put its wealthy nations to the blush.

In the statement of English railways, we observe a marked discrepancy between the sum total as given by Bradshaw 7,549½ miles, and that given by the *Engineer* 10,433 miles. We presume the latter is the more correct figure, and that Bradshaw's manual has omitted such roads as has neglected to send in their running times.

RAILWAYS OF GREAT BRITAIN AND ITS COLONIES.

GREAT BRITAIN AND IRELAND.—On the 31st December, 1860, the length of railway open and in use in the United Kingdom was 10,433 miles. The total amount of capital raised for their construction, and including that raised for lines then in progress, was £348,130,327. During the past year upwards of three hundred miles of new line have been opened; so that the total present length of British railways can not be far from 10,750 miles, nor their cost less than £355,000,000. The total traffic receipts for 1860 amounted to £27,766,622, and working expenses to £13,187,368, or to 47 per cent. of the receipts. 163,435,678 passengers were carried, besides, 60,386,780 tons of minerals, and 29,470,931 tons of general merchandise. The train mileage for the year was 102,243,692 miles run. The working stock consisted of 5,801 locomotives, 15,076 passenger carriages, and 180,584 wagons. Of the 10,433 miles of railway open, there were 7,583 miles in England and Wales, 1,486 miles in Scotland, and 1,364 miles in Ireland.

INDIA.—According to the reports of Mr. Juland Danvers, 842 miles of railway were open in India at the end of 1860, and of 2,932½ miles then in progress, 1,353½ miles were expected to be opened in 1861. The total railway guarantees had been for £56,000,000, but the construction of certain lines and portions of lines having been postponed,

the amount to be expended under guarantee was £49,000,000, of which sum £34,396,445 had been raised up to April 30th last, the end of the Indian official year.

Nothing like the amount of line expected to be opened this year has been completed. The East Indian Railway Company had 458 miles open at the date of their last report, viz., 248 miles in Bengal and 210 miles in the North west Provinces. Mr. Turnbull, the Company's Engineer in Bengal, and who has, from the first, been most punctual in keeping his engagements with the shareholders, had promised to open 50 miles, to Colgong, and 24 miles further to Bhaugulpore, in the course of the year just expired, besides 33 miles to Monghyr in the course of the present month, and 106 miles more to Patna in June next.

The Great India Peninsula Railway Company have 437½ miles of line open, and it is understood that 13 miles of the Bhoire Ghaut incline are to be opened this month. The opening of the 19 miles of this incline will be equal in importance to that of any 300 miles of the rest of the line.

The Madras Railway Company, at the date of their last report, had 252 miles of line open, viz., 224 miles westward from Madras, and 28 miles eastward from Beypoor, on the Malabar coast.

The Bombay, Baroda, and Central India Railway was open, at the date of the last report, for a length of 132½ miles from Doolia to Bulsar. The line for 23 miles northward to Neriad was expected to be open by the first of this month. The whole line of 313 miles will, it is expected, be opened for £3,130,000, or £10,000 per mile. This line, it will be recollected, was pronounced impracticable by Robert Stephenson. The East India Railway, of the practicability of which there has never been any doubt, is now estimated to cost £16,000 per mile.

The Scinde Railway, 114 miles long, is open throughout.

The Great Southern of India is open for a length of 14 miles.

It appears, therefore, that, up to the date of the last advices, 1,408 miles of railway were open in India, and we have reason for supposing that at least 110 miles more are now open.

The Eastern Bengal line is expected to be open early this year.

About one half of the Calcutta and South Eastern, a line about 30 miles long, was expected to be opened by the beginning of this year, and the whole line would, it was thought, be opened in the course of the spring. The Indian railways are of 5 ft. 6 in. gauge.

CANADA.—The extent of the Canadian Railways has been somewhat overrated by including with them a considerable length of line leased by the Grand Trunk Railway Company in the States of Maine and Michigan, U. S. Thus, a year ago, in an address delivered at

the Institution of Civil Engineers, the length of Canadian Railways was set down as 2,093 miles, which is considerably in excess of the length of line now open.

The Grand Trunk Railway is, by the last report, 885 miles in length in Canada, besides the 149 miles of the Atlantic and St. Lawrence Railroad, in Maine, U. S., leased to the Grand Trunk for 999 years, and 59 miles of the Detroit and Port Huron Railway, also leased by the Company in Michigan, U. S. Thus the whole length now worked by the Company is 1,093 miles, although, as the Riviere du Loup Branch, 110 miles long has been "farmed out" at a loss, the mileage given in the weekly traffic returns is 970. Of the whole capital account of £11,888,454, £429,772 stood at the last report to the credit of the account, and nearly £350,000 had been expended on the Atlantic and St. Lawrence leased line. The cost of the Grand Trunk, in Canada, may be set down therefore at £11,000,000, or £12,430 per mile, including the Victoria bridge, the cost of which, up to June 30th last, had been £1,356,021.

The Great Western of Canada is 229 miles long, from Suspension bridge, near Niagara Falls, to Windsor, opposite Detroit. The Sarnia branch, from Komoka, beyond London, to Sarnia, is 51 miles long; the Toronto branch (from Hamilton) measures 39 miles, while the Guelph and other short branches make up the total length to 357 miles, the capital account, by a late report, being £4,976,049.

The Buffalo and Lake Huron line is 161 miles long; the Northern of Canada, with a short branch to Bell Ewart, is 96 miles long; the Montreal and Champlain line, with the Caughawaga branch, is 81 miles long; the Ottawa and Prescott, 54 miles; Brockville and Ottawa, 48 miles; London and Port Stanley, 24 miles; Welland, 25 miles; Coburg and Peterborough, 28 miles; Erie and Ontario, 17 miles; and Port Hope, Lindsay and Beaverton Railway, with Petersborough branch, 50 miles.

Thus the total length of Canadian lines now open is 1,826 miles, and, if we take the cost of the lines other than the Grand Trunk and Great Western at £8,000 per mile, we shall have (584 miles, £4,672,000) £20,648,049 as the total railway investment in Canada. The earnings on this sum are not much more than enough to cover working expenses.

In 1859 an official return showed that 1,573 miles of railway were open in Canada, the locomotives in use being 366 in number. The Grand Trunk had, at the date of a recent report, 212 engines, besides 41 on the Atlantic and St. Lawrence division, and 5 on the Detroit and Port Huron Line. Of the 366 locomotives in Canada, on the 1st of January, 1859, 47 had been made in the Province, while 209 had been made in the United States and 110 in England, both those made in the United States and here paying an *ad valorem*

duty of 12½ per cent. on their importation into the Province. Nine tenths of the length of the Canadian railways are of 5 ft. 6 in. gauge, the rest being 4 ft. 8½ in.

NEW BRUNSWICK.—The European and North American Railway is open for 110 miles from St. John's to Shediac, and the cost may be put down at £700,000. The New Brunswick and Canada Company had 65 miles of line opened at the date of a recent report, the cost having been £350,000. Additional sections were about to be opened.

NOVA SCOTIA.—The Nova Scotia Railway, from Halifax to Truro, is 61 miles long, and the Windsor Branch 38 miles long, making 99 miles in all, costing, say, £1,000,000, and worked by 20 locomotives, mostly by Nelson, of Glasgow.

VICTORIA.—Eight short lines of railway now radiate from Melbourne, viz., to St. Bilda and Brighton, 8 miles; to Sandridge, 2½ miles; Melbourne and Williamstown, 9 miles; Melbourne and Geelong, 47 miles; Melbourne and Sunbury, 46 miles; Melbourne and Essenden, 4½ miles, and two short suburban branches of 7 miles. The Sunbury line has, we believe, been extended to Woodend, a distance of 28 miles from Sunbury, and it was some time since promised that the Geelong and Ballarat line, 53 miles long, would be opened in 1861. In this case, 205 miles are now open. The expenditures of the Victorian Government, on account of railways, had been £7,828,233 up to the 1st of January last, and it was estimated that £2,050,000 would be expended during the year 1861. In the meantime the works on the Melbourne and Mount Alexander line, 152 miles long, of which 50 miles, via Sunbury and Woodend, are already open, are in active progress, and the estimated cost is no less than £34,000 per mile. The Victorian lines are of a gauge of 5 ft. 3 in. (Irish gauge.)

NEW SOUTH WALES.—From Sydney three important lines of railway will radiate in directions expressed by their names, viz., Great Southern, Great Western and Great Northern. The Southern line, ultimately to be extended to the Murray river, to join the Victorian railways, is completed via Paramatta and Campbelltown to Picton, a distance of 54 miles. From Sydney to Paramatta, 13½ miles, the cost had been £40,000 per mile, for a double line, and thence, with a single line to Picton, the cost has averaged £10,000 per mile. The works are in progress (under a contract with Sir S. M. Peto & Co.) on the extension to Goulburn, but the cost will be very great. The Western line, leaving the Southern near Paramatta, is open, we believe, to Penrith, a distance of 20 miles. Hence, it is to be extended across the Blue Mountains to Bathurst, on the River Lachlan, one of the principal tributaries of the Murray, which flows many hundred miles westward, finally emptying itself in Encounter Bay. The Northern Railway commences at Newcastle, 60 miles north

of Sydney, and has been opened, we believe, to Singleton, a distance of 51 miles. This line is to be extended up the River Hunter to Muswellbrook, a distance of 70 miles. Sir S. M. Peto's contracts for the Goulburn, Bathurst and Muswellbrook extension, 218 miles in length, cover work to the value of £4,000,000. The lines completed measure 125 miles, and their cost has been about £1,750,000. The New South Wales lines have a gauge of 4 ft. 8½ in.

SOUTH AUSTRALIA.—Railways are open from Port Adelaide to Adelaide, a distance of 3½ miles, and from Gawler to Kapunda, 16 miles. The cost has probably been about £400,000.

CAPE OF GOOD HOPE.—Of the Cape Town Railway, which will extend for 56 miles to Wellington, the first 28 miles from Cape Town to Stellenbosch were to have been opened by the end of 1861. The capital of the Company, upon which a six per cent. guarantee is given, is £500,000. A line of 8 miles, to cost £100,000, has since been projected from Cape Town to Wynburg.

NEW ZEALAND.—The Christchurch and Lytleton Railway, to be 6 miles long, and estimated to cost £240,000, has been commenced. A long and difficult tunnel is to be driven, which accounts for the great comparative expense. A line of railway is in progress, also, out of Nelson.

Ceylon.—A line is in progress.

DEMERARA.—A short line has been open and in use for some time.

SANDUSKY, MANSFIELD & NEWARK R.R.

We are indebted to the officers of this Company for a copy of the sixth annual report of the Company, embracing its operations for the year ending Dec. 31, 1861. The length of the road from Sandusky to Newark is 116½ miles. The length of branches owned by the Company is 9 miles, making in all 125½ miles owned by this Company. The capital stock of the Company is \$1,110,000. The total cost of the road is stated at \$2,309,278 58. This gives a little less than \$18,500 per mile of road built. In this item this road will compare favorably with any road in the United States, and is an instance of economy in construction that could have been safely imitated by many other lines, not only in our own State, but among our neighbors. The general statement of the Company is as follows:

GENERAL STATEMENT,

Sandusky, Mansfield & Newark Railroad.

Railway Property.....	\$2,309,278 58
Coupon Interest Acc't, 1st Mortgage Bonds.....	122,751 06
— "Funded,".....	105,509 78
Coupon Interest Account, Domestic Bonds.....	21,633 00
Interest Domestic Bonds, over due.....	6,618 94
Freight Department, due from Stations.....	5,826 07
U. S. Mail Service.....	5,423 67
Expense Account 1862, Stock on hand.....	13,305 97
Morris Ketchum, to pay Int. 1st Mort. Bonds.....	1,329 98
Bills Receivable.....	28 47
Individual Accounts.....	2,542 38
Cash in Treasury.....	9,464 12

\$2,603,112 02

CONTRA.	
Capital Stock issued.....	806,520 19
" " due Receiver.....	42,250 00
Bond Account, 1st Mortgage.....	1,290,000 00
" " Domestic Bonds.....	65,350 00
" " " New Series.....	20,000 00
Bills Payable.....	1,208 81
" Special (Funded Coupons)...	105,509 78
Profit and Loss.....	253,221 62
Ticket Department, due other Roads.....	989 41
Paymaster's Department.....	13,329 04
Freight Suspense Account.....	276 62
Individual Accounts.....	4,456 55
	\$2,603,112 02

The earnings of the road for the year ending Dec. 31, 1861, were as follows:

EARNINGS.	
From Passengers.....	\$75,584 31
" Freight.....	80,537 53
" U. S. Mail.....	12,400 00
" Expresses.....	2,748 15
" Miscellaneous.....	441 99
Total.....	\$171,711 98

The operating expenses for the same period were:

Repairs Track, &c.....	\$49,514 59
Shops.....	1,341 73
Train Expenses.....	39,933 03
Oil and Fuel.....	13,626 10
Station Expenses.....	13,079 87
Salaries and Sundries.....	16,706 43
Total.....	\$134,101 75
Net, less taxes.....	\$37,610 23

The following is the comparison between the past year and the preceding one:

Gross earnings for 1860.....	\$185,934 38
" " 1861.....	171,711 98
Decrease.....	\$14,222 40
Expenses for 1860.....	\$151,767 24
" " 1861.....	134,101 75
Decrease.....	\$17,665 49
Net increase, 1861.....	\$3,443 09

The decrease in earnings has been almost wholly in freight, that item being \$14,031 07 less than in 1860. Notwithstanding this feature, our expenses have been so far reduced as to give a net gain of \$3,443 09 for the year. Our expenses for the last year have been diminished in each department, but chiefly in the maintenance of track. The expenditures in that department in 1860 were swelled in consequence of repairing the damage to roadway, bridges and culverts, occasioned by the extraordinary flood in April of that year.

The roadway and track have been well sustained, and are now in safe condition, but by reason of our diminished income, the ballasting of a portion of the track was deferred another year; this cannot longer be postponed.

We have purchased and laid in the track eighty-five tons of new iron rails, twelve tons of chairs, and six tons of spikes. 40,584 new ties have been laid in the main track and sidings.

The Board would here take occasion to renew their commendation of the faithful and efficient manner in which Mr. Stewart has performed the duties of his office.

The total mileage of all trains, in 1861, was 215,280, at a cost of 62 28-100 cents per mile.

MACHINERY.—This department is now in effective condition. Extensive repairs, alterations and renewals have been made in our locomotives during the year; with two exceptions, all of them have been remodeled and

thoroughly renovated within the last four years. The repairs of locomotives last year cost 5 13-100 cents per mile run. The repairs and rebuilding of cars have kept pace with the business wants of the road. In addition to ordinary repairs, twenty-two cars of all kinds have been rebuilt within the year. The expense of this department has been \$4,560 87 less than they were in 1860.

The Board instructed the Treasurer to pay, on and after the 25th of December last, one-half the principal of the Company's outstanding "Domestic Bonds," due July 25th, 1859; it is believed the other half of these bonds will be paid within the next six months. The Directors have always been united in the expediency of retiring the "Domestic Bond" debt without improper delay; they believed, (and still believe,) that every implication of good faith bound them to this course. It is hoped that these bonds will all be retired within a reasonable time, and the entire net income of the Company thereafter be applied to the payment of interest on our mortgage Bonds.

The usual promptitude, regularity and freedom from accident have attended the running of our trains the last year. No passenger has been injured, and the entire loss and damage to property transported have been less than one hundred and fifty dollars.

The report is accompanied with valuable statistical tables of the movement of passengers and freight from the various stations on the line, classification of freight, with statements of oil, tallow and waste used by the different engines and engineers. From these latter statements it appears that the total mileage of the year was 215,280; on which was consumed 633½ gallons of oil and 4,269 lbs. of tallow. The average number of miles run to one pint of oil was 42.4, and the average number of miles run to one pound of tallow was 50.4. The engines that made the largest mileage during the year generally consumed less than an average amount of oil and tallow, while the largest consumption of these two articles was shown in those that made the smallest mileage. The same remark is to some extent applicable to the engineers. The smallest consumption of oil was on the engine Independence, which had a mileage of 22,981 miles, at 49.7 miles to a pint of oil, and 75.2 miles to a pound of tallow; while the engine Hocking, which had a mileage of only 6,416 miles, consumed a pint of oil to 33.4 miles, and a pound of tallow to every 36 miles. The engineers varied from 29.2 miles to 46.5 miles to a pint of oil, and from 38 miles to 72.6 miles to a pound of tallow.

The officers of this Company for the year 1862 are:

Directors—Wm. Durbin, Sandusky, Ohio; Wm. P. Chapman, Sandusky, Ohio; John W. Sprague, Huron, Ohio; Samuel M. Robinson, Plymouth, Ohio; Robt. McComb, Mansfield, Ohio; H. P. Warden, Mt. Vernon, Ohio; Jas.

E. Woodbridge, Mt. Vernon, Ohio; Jerome Buckingham, Newark, Ohio; James Lyon, Hebron, Ohio.

Wm. Durbin, President and Superintendent; John W. Sprague, Secretary; Wm. P. Chapman, Treasurer; Alex. H. Barber, General Ticket and Freight Agent; James H. Stewart, Assistant Superintendent; Thos. Hogg, Master Mechanic.

PENNSYLVANIA RAILROAD.

The annual meeting of the stockholders of this Company was at Philadelphia on February 3. The following is the report presented by the Board of Directors:

Your Board of Directors, in conformity with the requirements of the Charter of the Company, submit a statement of its affairs for the year 1861, accompanied by the usual annual reports and statements of the several officers in the immediate charge of the Company's railway and canals.

The following condensed statement exhibits the earnings and expenses of operating your road during the year 1861.

Earnings from passengers.....	\$1,406,018 41
" " Government troops.....	145,158 14
" " U. States mails.....	74,398 62
" " expresses.....	75,120 00
" " freight.....	5,398,025 56
" " miscel's sources.....	201,020 29
	7,300,000 95
Expenses of conducting transp'n.....	\$1,199,131 24
" " motive-power.....	1,102,406 36
" " maintenance of road.....	1,011,677 14
" " " cars.....	270,825 00
General expenses.....	69,023 02
	3,653,062 75

Leaving net earnings from road..... \$3,646,938 19

Exhibiting an increase in gross revenue over that of 1860, amounting to \$1,367,299 47, and in net receipts of \$1,350,535 79.

Omitting receipts from transportation of Government troops, \$145,158 14, the income from passenger travel is \$47,974 36 less than last year. The total number of passengers carried over the road during the year was 1,059,088, each passenger traveling an average distance of nearly 58 2-10 miles.

The earnings from freight exhibit an increase over those of 1860 of \$1,206,241 59. The whole movement of freight on the road during the year, exclusive of 138,499 tons of coal, wood, lumber, iron, &c., for the use of the Company, was 1,620,586 tons. Of this amount there was transported in the cars of the Company 276,861 tons of coal, and in the cars of individuals 427,893 tons, making the whole amount of coal transported 704,754 tons, showing an increase over 1860 of 181,531 tons. The amount of coal delivered at Pittsburg from mines on the line of the road during the year was 131,309 tons; a decrease of 7,680 tons as compared with last year. The aggregate tonnage of the line exceeds that of last year 274,061 tons.

It will be seen that nearly the whole of the increase in the revenues of the Company during the past year was derived from the transportation of eastward bound freight to meet the European demand for our breadstuffs. The large increase in this traffic during the

latter part of the year was due in a great measure to the closing of the Mississippi river as a commercial avenue. The additional rates obtained, in consequence of the supply of freight seeking the seaboard markets being in excess of the facilities of the east and west lines for its transportation, have doubtless affected our revenues beneficially, but the reduced rates upon the local traffic required by the "commutation bill" of the last session of the Legislature has to some extent neutralized this advantage.

As the Mississippi river can not long continue closed to commerce, it would not be prudent to treat revenues thus temporarily acquired as a legitimate source of dividend by a Company whose line is unfinished. Such a course would tend to give the shares of the Company a fictitious value. The Board has therefore preferred to invest the surplus net revenues, after declaring the usual dividends, in the extension of your road to the Delaware river, the erection of an elevator, wharves and depots at that terminus, and to increase the equipment of the line. The propriety of incurring so heavy an investment in additional rolling stock, to meet a seemingly temporary demand for transportation facilities, was and might have continued to be a question for serious reflection if you had not authorized the Board to lease the Philadelphia and Erie Railroad, and equip it with the requisite cars and locomotives. Since this arrangement has been concluded we have proceeded without hesitation to enlarge our transportation facilities, confident that when this extra demand for their use ceases upon the Pennsylvania Railroad, ample employment will be found for the surplus stock that we may have upon the Erie line in developing its traffic.

The large increase in the business of the Company occurring subsequently to the declaration of the last dividend, it was not deemed advisable to advance the rate. The financial position of the Company, however, is now such that it is believed a semi-annual dividend of four per centum may be paid in May next, and its continuance thereafter at the same rate confidently expected.

It is gratifying to your Board to be able to state that this Company has not only paid to its share holders from the *net revenues* of the road six per centum per annum from the date of the payment of the first instalment upon their stock, but it had also accumulated in addition, at the completion of a single track from Harrisburg to Pittsburg, in 1853, surplus net profits amounting to \$589,185 79, which amount was carried to the credit of construction account, in conformity with the provisions of the Company's charter. In addition to this appropriation of the net profits of the road, the Board, in 1858, directed the amounts subscribed under your instructions to the Marietta and Cincinnati and to the Springfield, Mount Vernon and Pittsburg Railroads, which

were never finished, together with some small accounts, amounting in all to \$958,500, to be charged to profit and loss. The Company has also had levied upon its traffic tonnage duties, not exacted from other railways, amounting to \$1,661,912.

Notwithstanding these heavy drafts upon the Company's revenues, amounting in the aggregate to \$2,471,304, after deducting the amount still due to the commutation roads, we find, from a careful estimate of its assets, that they still exceed the amount actually expended upon the road, shops, equipment, &c., of the Company, \$3,020,603 69, which, with the exception of the amounts charged in 1858 to profit and loss, will be found represented in the Treasurer's statement by a sinking fund, the extension of the road to the Delaware river, new locomotives, cars, Pittsburg, Ft. Wayne and Chicago Railroad bonds and stocks, &c.

A bill was passed at the last session of the Legislature commuting the duty levied upon tonnage passing over the Pennsylvania Railroad. Among its provisions was an obligation upon the part of this Company to purchase the first mortgage six per cent. bonds of several railway companies at par to the extent of \$850,000. Although none of these Companies have fully complied with the conditions of the act, which required a specific amount of work to be done before they could demand its fulfillment, yet the Board has agreed to pay as the work progresses the following amounts to the several roads named:

The Bald Eagle Valley Railroad Company.....	\$200,000
The Tyrone and Clearfield Railroad Company...	75,000
The Ebensburg and Cresson Railroad Company.....	66,500
The Bedford Railroad Company.....	100,000
The West Pennsylvania Railroad Company....	250,000
	\$691,500

The only other line that can be placed in a condition to participate in the advantages of the commutation bill is that between Pittsburg and Steubenville, to which Company the remainder of the fund, \$158,500 will be paid. The bonds of these companies will not, for some years at least, be considered of much value, except those of the Pittsburg and Steubenville Railroad Company. The indirect advantages, however, to be derived from the completion of these roads will be the chief benefit that this Company can expect to receive for the expenditure of the large sum required by the commutation bill, which amount in good faith belonged to this Company and the citizens along the line of the Pennsylvania Railroad, whose products, to the extent of the tonnage they sent to market, bore the burthen of the impost.

In accordance with the authority given to the Board at your special meeting on the 12th of November last, a contract and lease has been entered into between this Company and the Philadelphia and Erie Railroad Company, under which we have taken possession of that work for the term of nine hundred and ninety-nine years. The completion of that road,

under this contract, is now fully assured, and the advantages to be derived from it, both to the State, the citizens along the line of the road, and to this Company, will fully vindicate the wisdom of the policy that led to its adoption.

The report of the General Superintendent will show that the cost of motive power, with the addition of six new locomotives, to supply the places of those unfit for regular service, has exceeded during the past year that of the year previous \$131,916 04, which is less than is due to the increased tonnage of the road.

The cost of maintaining the road has also increased \$228,513 33, which is attributed chiefly to the additional amount of new iron (6,493 tons) used during the last and previous year, in consequence of the length of time it had been in service and the large traffic of the year, which while it caused additional wear and tear to the railway also interrupted the forces engaged in the repairs to a greater extent, thereby increasing the amount of labor in renewing and adjusting the track.

The amount of new iron used during the year was 14,863 tons, which is considerably in excess of the average number of tons that will be required to maintain the road for a series of years.

The cost of the *additional* guards to the bridges, etc., in consequence of the civil war, has been \$28,797 18.

The increase in the repairs of cars is wholly due to the increased tonnage of the line.

The large decrease (\$340,229 84) in the expenditures in conducting transportation is mainly the result of the commutation of the tonnage tax since the seventh day of March, 1861, and the lease of the Harrisburg and Lancaster Railway, under which, instead of tolls, (heretofore embraced in this account,) the Company is paid the interest on their debt of \$700,000, at 6 per centum, and 7 per centum upon their share capital of \$1,182,550.

In the general expense account there is a saving of \$13,808 41 compared with the previous year.

The extension of your road from West Philadelphia to the Delaware river is completed, and is now in successful operation. Its construction was not undertaken a day too soon, as the tonnage of the line deliverable in the city had become limited by the want of capacity of the city tracks, under the slow movement by horse power, to pass the traffic as fast as it reached here, thus detaining rolling stock that would otherwise have been profitably employed in relieving the pressure for transportation at Pittsburg. These tracks will now be relieved from the through freight passing over them, and the passenger travel also, as soon as the Company shall erect their new passenger station west of the Schuylkill. A proposition to lease the City Railroad on Market street, for a nominal sum, to transport the reduced business that will then pass over it, has

been under consideration by the City Councils, but not as yet acted upon. Such a lease would involve the Company in an annual loss in maintaining said road, which could only be justified by the importance of keeping the line in such repair as will not damage the Company's rolling stock as heretofore.

The earnings and expenses of the canals owned by the Company for the past year were as follows:

Earnings of the Eastern or Susquehanna Divis.	\$136,698 98	
" " Juniata Division.....	23,132 98	
" " Western Divisions.....	9,531 16	
" " Miscellaneous sources.....	4,726 62	
Total earnings.....	\$176,109 04	
Expenses of the Eastern or Susquehanna Division.....	\$68,544 03	
Expenses of the Juniata Divisions.....	40,261 63	
Expenses of the West. Divisions, (chiefly caused by freshets).....	39,066 93	147,872 59
Leaving net revenues.....	\$28,236 45	

The decrease in the revenue of the canals, compared with those of the previous year, is \$33,256 79, which is due to the paralysis that pervaded all business interests of the country, from the uncertainty that enveloped the future, until August. After that period the traffic revived, and during the autumn was quite equal to the boat capacity upon these improvements.

The canal upon the upper Juniata has but very little business upon it, and has not been much improved since it was purchased by the Company. The freshets that occurred during the past season were quite destructive on this part of the work and upon the divisions west of the Allegheny Mountains. The expenditures for repairs caused by these freshets amounted to \$30,271, chiefly disbursed on the Western divisions; otherwise the net receipts of the canals would have been equal to those of the previous season. The damages sustained from the freshets, however, are but partially mended. From a close inspection of the work, the Engineer is of the opinion that it will require, during the next three years, for the renewal of the mechanical structures, fully \$80,000 to place the line in complete order, and capable of resisting freshets, after which but little work will be required upon it for many years. The repairs upon the Western division are of a more temporary character, as it is presumed that the West Pennsylvania Railroad will in a short time be completed to the Allegheny river, when this portion of the canal may be abandoned.

Instructions have been given to the Engineer Department to provide materials to complete the double track, during the ensuing summer, upon that portion of the line between the bridge over the Susquehanna river and the aqueduct at Duncan's Island, across the Juniata river, 11½ miles, and between Mill Creek and Huntingdon, 5 miles; also from Johnstown to Nineveh, 9½ miles—in all 26 miles—and to prepare the grading for laying a double track in 1863, between McVeytown and the Juniata crossing below Newton Hamilton, during which year the double track between Huntingdon and Petersburg, 6½ miles,

and between Nineveh and Florence, 4 miles, in all a distance of 10½ miles, should also be laid, which will complete the double track continuously from Mill Creek to Pittsburg. There are ten miles of single track between Newport and the Juniata Aqueduct, at Duncan's Island, which, when closed, will complete all the double track that it is important should be laid.

On the 28th of October last the Pittsburg, Fort Wayne and Chicago Railroad was sold by the United States Marshal, at the city of Cleveland, to J. F. D. Lanier, S. J. Tilden, J. Edgar Thomson, Louis H. Meyer and Samuel Hanna, Esqrs., a committee appointed at a meeting of the creditors and shareholders of that Company. The road is now worked under the direction of this committee, but it will be transferred to the new corporation under the style of the Pittsburg, Fort Wayne and Chicago Railway Company, on or before the 1st of March next. In this new corporation the Pennsylvania Railroad Company holds over one million of dollars of its mortgage bonds, and \$816,050 of its stock. The readjustment of the debts of the Company is substantially the same as proposed by the President of this Company while acting in the same capacity for the other Company, but in consequence of the impossibility of securing a full acquiescence of all the interests to the plan, it became necessary to place the work under the auctioneer's hammer, which, after the expenditure of much labor, time and money, that might have been avoided, has secured the same results.

The reorganization of the debt of the Company upon a basis of entire equity to all the interests seems to have acted like magic upon its securities; the first mortgages having been sold at 95 per centum, which a short time since could have been obtained at 50 per centum, and the second mortgages can now be sold for much more than they cost this Company; they are, however, worth more than their present market value. In carrying out the measures that secured this favorable result, and saved the stock investment of this Company in that road, the President met with the cordial and valuable assistance of the Chairman of the Finance Committee and also of the Road Committee.

The Pittsburg, Fort Wayne and Chicago Railroad Company has, during the past year, done a large and profitable business, fully sustaining the policy which dictated its completion as an independent line to Chicago, and at the same time demonstrating its ability to meet the interest upon all its bonds; while the shareholders will ere long begin to receive regular dividends.

The completion of the Pittsburg and Steubenville Railroad is the only other Western line the construction of which it is very important for this Company to secure. Arrangements can be made to carry the work through

upon favorable terms, as soon as the desired legislation is obtained.

At the Delaware terminus the Company has in process of erection a fire proof elevator for the storage of grain, capable of holding 475,000 bushels. This improvement, in connection with a covered wharf, extending from it 80 feet in width by 515 feet in length, will afford facilities for the shipment of Western products, much needed in this city, which will by the saving effected cause largely increased shipments from this port to Europe and coastwise. This elevator is so constructed that its capacity can readily be doubled, while the cost of attendance will remain nearly the same.

The Philadelphia, Wilmington and Baltimore Railroad Company, the Philadelphia and Reading Railroad Company, and the Pennsylvania Railroad Company have organized the Junction Railroad Company, under the charter procured from the Legislature of 1860, and amended at the last session. The object of this line is to connect these three railways by a continuous line along the west bank of the Schuylkill river from the Reading Railroad, near Peter's Island bridge, to the Philadelphia, Wilmington and Baltimore Railroad, at Gray's Ferry, intersecting the Pennsylvania Railroad near the Wire bridge, at Fairmount, so that an interchange of freights between these lines may be effected without passing through the populous portions of the city.

The deficiency of our line in the proper accommodations for passengers at its Pittsburg and Philadelphia termini, referred to in our last report, has not been supplied. At this point the location of this station has been delayed that it might conform to the changes that time must evidently effect in the policy of the Camden and Amboy Railroad Company in relation to its entrance into this city. At Pittsburg, the recent action of the City Councils, and the movement of the lines terminating there, has enabled this Company to decide upon the proper location of the station at that point, and its erection, we think, will be effected this year.

The Directors again feel much gratification in being able to acknowledge the very efficient services of the employees of the Company during the past year. The circumstances attending the business of the year have taxed to the utmost the capacity and powers of endurance of the employes generally, who have cheerfully met the demands upon them.

By order of the Board,

J. EDGAR THOMSON, *President.*

THOMAS A. SCOTT, *Vice President.*

SANTA RITA SILVER MINING COMPANY.—The annual meeting of the stockholders of this Company will take place at their office, 167 Walnut St., Cincinnati, on Monday, March 17, 1862, at 10 A. M. A full representation is desired.

T. WRIGHTSON, *Secretary.*

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	R to of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	48		\$	\$										
Baltimore and Ohio.....	Md.	380		13,111,800	10,781,833	566,070	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do										"	2,500,000	6		1885	
do do										"	700,000	6		1860	
do do										"	1,122,500	6		1875	
do Washington Branch.....	Md.	30		1,650,000						"	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind.	118		1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7		1866	
do do										2d	160,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	121	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	96		3,988,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	450,000	6		1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	860,000	7		1864	
do do										2d	80,000	7		1865	
do do										3d	950,000	7		1865	
do do										4th	1,365,800	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7		1865 & 1870	
do do										2d	600,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7			
do do										2d	1,535,000	7			
do do										3d	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,750	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	41 1/2	Feb. & Aug.	
do do										2d	3,600,000	7	41 1/2	Feb. & Aug.	
do do										3d	2,000,000	6	11	May 1.	
Chicago and Rock Island.....	Ills.	53 1/2	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7		1870	
Chicago, Burlington and Quincy.....	"	61 1/2	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	94	1863	
do do										2d	813,000	8		1890	
do do										1st Mor. Chi. & Aur.	399,000	7		1867	
do do										2d	303,000	7		1869	
do do										1st Cent. Mil. Tract	393,000	7		1864	
do do										2d	215,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
Cincinnati, Hamilton and Dayton.....	Ohio.	60		2,155,800	1,356,000		644,228	174,585	Mar. 31, 1861	1st Mortgage.....	441,000			1867	
do do										2d	950,000			1860	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d	532,000				
do do										3d	104,000				
do do										Income.....	305,500				
Cleveland and Mahoning	Ohio.	68 1/2		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000				
do do										2d	499,000	7			
do do										3d	341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	16	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	13 1/2	1860	
do do										2d " M. L. or 1st Ex.	1,382,000	7		1873	
do do										3d 2d Ex.	1,165,000	7		1865	
do do										4th 3d Ex.	1,154,000	7			
Cleveland and Toledo.....	Ohio.	44 1/2	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	359,000			1867	
do do										1st " 2d Div.	263,000	7		1872	
do do										2d " "	265,000	7		1862	
do do										1st " Tol. Nor. & Clev	521,000	7		1863	
do do										2d " "	293,300	7		1863	
do do										Junction Income..	44,300	7		1862	
do do										C. & T. Income..	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	103	135	4,746,100	519,000	4,201	1,255,003	664,898	Dec. 31, 1861.	1st Mortgage.....	519,000			1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	98 1/2		3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000			1861	
do do										2d	303,000			1862	
Columbus and Xenia.....	Ohio.	54 1/2		1,490,000	290,700	50,500	See I.	Miami.		Dividend.....	272,700			1860 & 1866	
Columbus, Piqua and Indiana	"	103		In hands of Receiver.	2,512,000		292,267	375,002							
Dayton and Michigan.....	"	142		2,176,666											
do do															
Dayton and Western.....	Ohio.	38		307,240		80,845				1st Mortgage.....	300,000	8			
Detroit and Milwaukee.....	Mich.	186		No report						2d	2,212,000	8			
do do										1st Mortgage.....	300,000	7		1875	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report						2d	1,000,000	8		1866	
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		986,061	1,219,100	249,688	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.											
Galena and Chicago Union.....	Ills.	68	121	6,038,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	400,000				
do do										2d	18,000				
Great Western	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage.....	1,993,000		100	1862 & 1863	
do do										2d	1,520,000		99	May 1, 1875	
Green Bay, Milwaukee and Chicago...	Wis.	54		400,000	No report					1st Mortgage W. D.	1,041,000	10			
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573		E. D.	1,350,000	7			
Hannibal and St. Joseph.....	Mo.	206		1,041,066	10,354,000	220,336	996,907	512,933	Sept. 1, 1860.	Land Mortgage...	5,000,000		49 1/2		
do do										Mortgage Conv.	1,354,000		30		
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	123,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	927,000	6		1873	
Hudson River.....	N. Y.	32 1/2	144	3,758,466	9,107,000	162,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	102	1869 & 1870	
do do										2d	2,000,000	7		1860	
do do										3d	1,840,000	7		1875	
Illinois Central.....	Ills.	57 1/2	455	15,654,920	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000			1868	
do do										Construction.....	12,885,000	7	93	1875	
do do										"	4,115,000	7		1875	
do do										Debentures.....	42,740				
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,900	Jan. 1, 1860.	1st Mortgage.....	600,000				
do do										2d	578,000	10			
do do										Income.....	38,700				
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,852	230,834		1st Mortgage.....	500,000			1866	
do do										2d	400,000				
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mortg.	200,000				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			1st Mortgage.....	649,954				
Iron.....	Ohio.	13		118,865	50,000		No report			2d	314,000				

ANNUAL REPORT OF THE PHILADELPHIA & READING R. R. CO.

To the Stockholders of the Phil. & Read. R. R. Co.:

The managers submit the following report of the receipts and expenditures for the year ending November 30, 1861, with the Treasurer's general balance sheet exhibiting the financial condition of the Company at that date:

[Here is given a long statement, in great detail, which we condense as follows:]

RECEIPTS.

From travel, 368,651, equal to 141,451 through passengers.....	\$ 337,904 69
From merchandise, 324,038 tons.....	406,321 22
From coal, 1,639,535 tons.....	2,111 023 39
From U. S. Mail and other sources.....	49,589 43
	\$2,905,838 73

EXPENSES.

Transportation.....	\$844 563 96
Roadway.....	245,473 85
Drawbacks, allowances, and all other charges.....	191,095 62—
	1,282 133 43

Net profit for the year.....	\$1,623,705 30
Interest on bonded debt.....	\$704,834 00
Bonds & mortgages, real estate.....	35,532 00
	\$740,366 00

Renewal Fund.—5 cents per 100 tons on 421,599,695 tons transported one mile during 12 months ending November 30, 1861.....	210,799 84—
	951,165 84

	\$672,539 46
--	---------------------

Dividend Fund for the year, which has been disposed of as follows:

Sinking Funds.....	\$150,000 00
State tax on capital for 1861.....	15,928 25
Div. on preferred stock for 1861.....	108,626 00
Accrued interest for 1861 on reserved dividends preferred stock.....	24,065 43—
	298,619 68

Balance of Dividend Fund, 1861.....	\$ 373,919 78
Add balance of Reserved Fund, 1860.....	406,822 62

Total Reserved Fund.....	\$ 780,742 40
--------------------------	----------------------

At the commencement of the season, it was hoped to maintain the same arrangements and prices as had been secured for the previous year.

The great development of the civil war caused such disturbance in all business arrangements that a loss in tonnage, both in coal and merchandise, necessarily ensued. This was the inevitable consequence of the disturbed state of the country, and its extent will be seen in the following statement of the comparative result of this and the preceding year.

Tabular statement in detail for each branch of Traffic, show the comparative results of the preceding year:

	1860.	1861.
Travel.....	Passengers. 129,978 Tons. 499,727	Passengers. 140,451 Tons. 599,620
Merchandise.....	499,727	599,620
Coal.....	1,578,156	2,328,153
Mail.....		19,618
Miscellaneous.....	31,791	29,571
Gross receipts.....	\$3,312,456	\$2,905,838
" expenditures.....	1,686 562	1,492,933
Net profit.....	\$1,625,894	\$1,412,905

Gross expenses, including Renewal Fund, in the

Year 1860, were 50 88-100 of gross receipts.
" 1861, " 51 38-100 " "

The receipts and expenses for each, per passenger and per ton, have been as follows:

	1860.	1861.
Per passenger.....	Cost. \$1 38 Received. \$2 57	Cost. \$1 34 Received. \$1 41
Merchandise, per ton.....	53 1 19	70 1 25
Coal " ".....	40 1 24	42 1 28

The gain in the number of passengers carried arises chiefly from the transportation of soldiers.

The expenses of transporting miscellaneous merchandise per ton, for each of the last ten years has been as follows:

January.	Cts. & ton.	January.	Cts. & ton.
1853.....	109 52	1858.....	99 13
1854.....	105 50	1859.....	95 31
1855.....	105 61	1860.....	74 73
1856.....	104 00	1861.....	63 06
1857.....	95 09	1862.....	70 22

The small cost of 53 cents per ton set down for the year embraced in the report of January, 1861, arises from the fact that Broad Top coal in the commencement of that trade was classed with merchandise. It is now placed with the other coal.

From this cause, viewing the year embraced in the report of January, 1861, as unsuitable for comparison, it will be seen that the present year exhibits a reduction in cost of this item of 6½ per cent. as compared to the year embraced in the report of January, 1860, and a reduction of 40 per cent. as compared to the cost of the eight preceding years.

The result of the year's business, as condensed from transportation and income account, may be stated thus:

Gross receipts.....	\$2,905,838 73
Deduct working expense, including Renewal Fund.....	1,492,933 27

Profits or receipts over cost of working the road.....	\$1,412,905 46
--	----------------

From which deduct interest on bonded debt.....	\$704,834 00
Bonds and mortgages.....	35,532 00—
	\$740,366 00

	\$ 672,539 46
--	----------------------

This has been credited as follows:

Sinking Funds.....	\$150,000 00
State tax on capital.....	15,928 25
Dividends on preferred stock.....	108,626 00

Accrued interest on previous preferred stock, dividends not paid.....	24,065 43—
	298,619 68

Balance carried to Reserve Fund, 1861.....	\$ 373,919 78
--	---------------

Am't of credit of Reserved Fund, 1860, per report Nov. 30, 1860.....	\$423,904 86
--	--------------

Out of which has been paid sundry drawbacks on traffic for 1860.....	19,092 24—
	405,822 62

Total Reserve Fund.....	\$ 780,742 40
-------------------------	----------------------

After deducting all expenses, including renewal fund and interest on the bonds, the net profits are \$672,539 46, which is equal to 5 82-100 per cent. on all the outstanding stock, common and preferred, or to 7 per cent. on the preferred and 5 64-100 per cent. on the common stock.

The operations of the transportation department are stated in detail in the annexed report of the General Superintendent and the tabular statements which accompany it. The report of the Engineer fully exhibits the condition of the roadway department.

The charges to construction or capital account during the year have been:

For real estate at Willow street wharf and at Broad and Callowhill streets..... \$104,750 00 |

For locomotive engines and cars on the payment of sums due according to the leases of

710 coal cars.....	\$149,250 00
126 merchandise cars.....	68,100 00
200 coal cars for Broad Top trade.....	67,015 50
2 cars built.....	1,564 76
12 truck cars bought.....	1,350 00

1650 cars.....	Total cost.....	\$307,279 26
----------------	-----------------	---------------------

For Lebanon Valley Branch, land damages and second track..... 34,606 32 |

For Schuylkill and Susquehanna and Allentown Railroad stock..... 517,865 33 |

	\$964,500 91
--	---------------------

By these payments the rolling stock of the Company has been increased 1,650 cars. This subject was referred to in the last report, but the payments have been made during the past fiscal year. There remained on this account to be paid \$31,800, on the settlement of which the Company will receive 53 additional cars. This will fulfill all the obligations of the Company under the car leases.

The merchandise cars that have been acquired by the Company were those included

in an arrangement made in 1856 with the Catawissa and Williamsport and Elmira Railroad Companies for the lease of 179 merchandise cars, valued at \$90,900, for five years. Previous to the termination of the lease notice was given to the other Companies interested of our desire to pay off the principal at its maturity and become the owners of the cars. \$73,500 has been paid, and the title acquired to this Company exclusively to 135 of them. The remainder will be paid as it becomes due, and the cars become the property of the Company.

The demand for Broad Top coal having largely increased during the year, one hundred eight wheeled coal cars, in addition to the three hundred referred to in the last annual report, have been added to the number exclusively devoted to that trade, the cost of which was defrayed jointly by the Pennsylvania Railroad and by this Company.

The lessees of the old depot building at the corner of Broad and Cherry streets, not being able to comply with the terms of their lease, surrendered the premises, and they have been let to the United States, for a military hospital for one year or the war, at their option.

The transportation of live stock, chiefly for the New York market, via Allentown and Easton, has reached 35,411 tons, an increase of 264 per cent. over last year.

The net profits on the Lebanon Valley Branch during the past year have been equal to the interest (7 per cent.) on the bonds issued for its construction, and 5 per cent. on the remainder of its cost.

During the past year the Board of Managers decided that the true interest of the Company, and that of the miners in Schuylkill county, would be promoted by securing, by lease or purchase, the control of some of the lateral railroads leading from the main line of the road to the coal mines. The effect of this, it was believed, would be to introduce a more efficient administration, and to reduce the charges for toll and transportation and thus effect a reduction in the cost of placing coal at tidewater at Philadelphia.

For this purpose leases have been concluded with the roads leading by Mill Creek over the Broad Mountain into the second coal field at Ashland, with some branches in the Schuylkill and Mahanoy Valleys.

The only portion of the line which is not finished is about three miles near Ashland, upon which the grading is completed and the rails are now being laid. It will all be ready for traffic on the opening of navigation next spring. In the exercise of the general authority given to the Board of Managers, at the last annual meeting, a majority of stock has been purchased in the Allentown Railroad, and in the Schuylkill and Susquehanna Railroad. The road of the latter Company leads from Auburn, on the line of the Reading Railroad, 83 miles from Philadelphia to Rockville, at the east end of the Pennsylvania Railroad Company's bridge across the Susquehanna river, a distance of 54 miles. The road is entirely free from floating debt, and is subject to one mortgage of \$97,000 at 6 per cent. interest.

This purchase entirely obviates the necessity of the construction of an extension of the Lebanon Valley road to Dauphin, estimated to cost about \$200,000, and which was authorized to be made by the stockholders at their annual meeting in January, 1860. The cost of these purchases was \$517,865 88, of which \$81,865 33 was paid in cash, and the bonds of the Company, dated July 1, 1861, have been issued for the balance, \$436,000, bearing 6 per cent. interest, redeemable in ten

years, with a sinking fund attached of 10 per cent. per annum. It is believed that these purchases and arrangements will prove most advantageous to the interests of the Company. The dividend earned of 7 per cent. on the preferred stock for the past year has been declared payable in cash on the 15th inst.

One hundred and thirteen thousand three hundred dollars of the bonds of the Company have been purchased during the year. Of these \$53,800 have been charged to the sinking fund and cancelled; the remainder, \$59,500, being a part of the bonds due in 1860, had been so endorsed or defaced that the holders objected on that account to extending them. They were, therefore, purchased by the Company, and the bonded debt to that extent diminished.

For the arrears of dividends due upon the preferred stock, scrip was issued, payable December 31, 1862, amounting to \$372,432, with accrued interest.

It may be advisable, if the revenues of the Company during the current year permit it, to anticipate the payment of this scrip on favorable terms.

The policy indicated in the last annual report of issuing no more bills payable, and confining the transactions of the Company to cash payments, has been strictly adhered to during the past year.

The net income has been applied to the redemption of its debt and strengthening its position.

Some further payments of this character remain to be made before a return to cash dividends on the common stock can be determined on with an assurance of safety and permanence.

On the 15th of July Mr. Whitney felt it his duty to withdraw from the presidency of the Company, to give his attention to his private affairs.

He consented to remain in the Board, and has given to the Company the benefit of his assistance.

Mr. Charles E. Smith, previously one of the Managers, was elected in his stead. Mr. J. D. Steele resigned the office of Vice-President and became the Chief Engineer of the Company. It has not been thought necessary to fill the office of Vice-President.

Although their positions have been changed, the Company has had the benefit of the assistance of both these gentlemen.

By order of the Board of Managers.

CHARLES E. SMITH, *President*.

RAILROAD CONNECTION WITH THE SOUTH.

A bill was reported to the House of Representatives in Congress for the construction of a Railroad from Danville to connect with the Tennessee Railroad from Knoxville. Since the report of the bill we have observed no action upon it. We had hoped that a measure of such obvious importance, recommended by the President as a military necessity, would have met with prompt action on the part of Congress. The committee to whom the subject was referred acted both promptly and wisely, and lost no time in reporting a bill. We trust our representatives will see to it that the measure is not overslaughed.

The express passenger trains to Albany that were running last year are not now running.

MONETARY AND COMMERCIAL.

The excitement of the past week attending upon the glorious victories to the National cause has overshadowed every other feeling. The great question before the world has been whether we had a government or not—whether this last and greatest attempt on the part of a free and enlightened people at self-government was to be made a success by the determined will of the majority to compel obedience to constitutional law, or whether a minority of ambitious traitors could at will destroy this fair fabric of human happiness. Whatever may have been the opinions of the nations of the world hitherto on this subject, the events of the past week so clearly foreshadow the result that we apprehend even the worst enemies of constitutional freedom must admit the triumph of its sacred cause. With the capture of Fort Donelson, the strong post of the Confederates on the Cumberland river, the hopes of a successful resistance to the armies of the Union must die away. Already there are rumors that Governor Harris of Tennessee has ordered all persons in his State to lay down their arms, and that there has been an outburst of Union sentiment in New Orleans. These reports are probably premature; but yet, as indications of probable events, they tend to increase confidence.

Capital continues abundant for all good, legitimate business paper. Lenders seek such at 8 to 10 per cent. It is very difficult to secure good investments at the higher figure. While it is even more difficult to place second grade paper at rates which may justly be regarded as ruinous.

There is no variation in Exchange on the East. The rates are as follows:

	Buying.	Selling.
New York.....	par.	$\frac{1}{2}$ prem.
Philadelphia.....	par.	$\frac{1}{2}$ prem.
Boston.....	par.	$\frac{1}{2}$ prem.
Gold.....	24 prem.	34 to 34 $\frac{1}{2}$

The Senate has finally passed the Treasury Note Bill, with some changes, which will throw it back again into the House, and delay its final passage. There will be a persistent effort made to place such legislation around these notes as will make them legitimate objects of speculation in Wall-street. It is the duty of our National legislators to thwart this, and protect the interests of the people.

Since our last issue the banks of Detroit have suspended specie payment.

The effect of the war news on our home markets has been a general advance in Provisions, in anticipation of a re-opening of the Southern markets. Flour is quoted: Superfine, \$4 40 to \$4 50; Extra, \$4 50 to \$4 60; Family and Fancy, \$4 75 to \$5. Wheat, 95 to 98 cts. for Red; \$1 03 to \$1 05 for White. Corn, 30 cts. Oats, 28 to 28 $\frac{1}{2}$ cts. Rye, 51 cts., and in demand. Whisky, 20 cts. In New York it is quoted at 28 cts. Mess Pork, \$12. Lard, 7 $\frac{1}{2}$ to 8 cts. Bulk Pork, 3 $\frac{1}{2}$ cts. for Shoulders; 4 $\frac{1}{2}$ to 4 $\frac{3}{4}$ cts. for Sides, and 4 $\frac{1}{2}$ cts. for Hams.

At the East we notice a similar buoyancy of the markets. All varieties of Stocks have advanced. So also Government securities.

Mr. Cisco has issued the annexed notice in regard to the payment of the coupons due on the 19th inst. on the 7.30 per cent. Treasury notes dated August 19. It will be seen that he will not receive coupons sent by mail:

OFFICE OF THE ASSIS'T TREASURER OF THE }
UNITED STATES, N. York, Feb. 14, 1862. }
Holders of bonds of the United States, dated August 19, 1861, and payable three years from date, are hereby notified that provision is made for the payment in coin of the coupons of semi-annual interest which will become due on the 19th inst. All such coupons, together with schedules showing the number and amount of each coupon, and the aggregate sum of each parcel, must be presented for examination and verification at least three full business days before payment. The coupons cannot be received through the mails, but must be presented in person or through an agent in New York.

JOHN J. CISCO, Ass't Treas'r U. S.
OFFICE OF THE ASSIS'T TREASURER OF THE }
UNITED STATES, N. York, Feb. 8, 1862. }
The undersigned is authorized by the Secretary of the Treasury to receive on deposit United States notes as a temporary loan, for which interest at the rate of five (5) per cent. per annum will be paid, together with the principal, in like currency, on demand, after ten days notice.

JOHN J. CISCO, Ass't Treas'r U. S.
The earnings of the Michigan Central in January were:

January, 1862.....	\$230,159 03
January, 1861.....	142 333 70
Gain.....	\$87,825 33

The Toledo and Wabash Railway received during the month of

January, 1862.....	\$82,234 81
January, 1861.....	58,339 33
Increase.....	\$23,895 48

ERIE RAILWAY.

Great Broad Gauge, Double Track and Telegraph Route

TO
NEW YORK, BOSTON,
AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

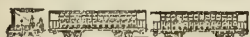
For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb. 6.

CHARLES MINOT, *Gen'l Sup't.*

The New York Central Railroad has declared the usual semi-annual dividend of 3 per cent., payable on the 20th inst., on the stock registered in New York, and on the 20th of March on that registered in London. Stockholders in New York will receive their dividends at the banking house of Duncan, Sherman & Co. The transfer books will be opened on the 24th inst.

1861. EAST. 1862. WINTER ARRANGEMENTS—TIME CHANGED.



CENTRAL OHIO AND STUEBENVILLE SHORT LINE RAILROAD, UNITED.

Connecting at Pittsburgh with the
PENNSYLVANIA CENTRAL RAILROAD,
OVER THE

*Shortest, Quickest and most desirable route
to all Eastern Cities*

VIA ALLENTOWN—Passengers by this line reach New York in advance of any Northern Route.
2:45 P. M. Train is the only one from Columbus at this hour by which Passengers can reach Baltimore or Washington the following day, and arrive in Philadelphia or New York before dark.

Sleeping Cars on all Night Trains.
The only route from Columbus to Baltimore, Philadelphia or New York

WITH ONLY ONE CHANGE OF CARS.

This Train also connects at Bellaire with the Baltimore and Ohio Railroad.

This Route is THIRTY MILES SHORTER to Pittsburgh, and more than 100 MILES SHORTER to New York than Northern Lines.

Baggage Checked Through to all Important Points East.

ASK FOR TICKETS VIA. BELLAIRE OR STEUBENVILLE.

Tickets good over either Route.
JOHN W. BROWN,
General Ticket Agent Central Ohio R. R.
IRA H. HUTCHINSON,
General Ticket Agent Steubenville Short Line.
Columbus, Dec. 25, 1861.

N. W. BALDWIN, MATHEW BAIRD.
M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,
In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

THE RAILROAD RECORD, PUBLISHED EVERY THURSDAY MORNING, BY WRIGHTSON & CO. OFFICE—No. 167 Walnut Street. SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.	
As square the space occupied by ten lines of Nonparell.	
On square, single insertion,.....	\$1 00
" " per month,.....	3 00
" " six months,.....	12 00
" " per annum,.....	20 00
" column, single insertion,.....	5 00
" " per month,.....	10 00
" " six months,.....	40 00
" " per annum,.....	80 00
" page, single insertion,.....	15 00
" " per month,.....	25 0
" " six months,.....	110 00
" " per annum,.....	200 00
Cards not exceeding four lines, \$5.00 per annum.	

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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrearages are paid.
If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.
If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.
Subscription and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the Record.

Railroad officers will place us under obligations if they will forward promptly to this office the Annual Reports, Monthly Statements, and such other matters as they may deem worthy of publication.
Subscribers in Great Britain, 13s. 6d. (\$3' payable in advance.

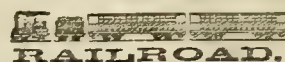
Arrival and Departure of Trains.

	Depart.	Arrive.
<i>Cincinnati, Hamilton & Dayton—</i>		
Logansport & Chicago Express.....	7.30 A. M.	9.15 P. M.
1st R. I. C. T. & Sand. Mail.....	7.30 A. M.	5.45 P. M.
Dayton & Toledo.....	7.30 A. M.	9.15 P. M.
2nd. Ham. Accommodation.....	9.00 A. M.	8.10 A. M.
3rd. Richmond, Day. & Bell'n Ex.....	3.30 P. M.	9.15 P. M.
4th Dayton, Tol. & Detroit Ex.....	5.30 P. M.	11.25 A. M.
Logansport and Chicago Express.....	7.30 P. M.	8.10 P. M.
Glendale Accommodation.....	7.30 P. M.	7.00 A. M.
6th. Columbus Express.....	10.00 P. M.	7.40 A. M.
<i>Little Miami—</i>		
Morrow Accommodation.....	7.40 A. M.	1.30 P. M.
2d. Day Express.....	9.45 A. M.	6.50 P. M.
Camp Dennison Accommodation.....	3.15 P. M.	6.10 P. M.
3d. Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
4th. Xenia Accommodation.....	5.50 P. M.	8.00 A. M.
<i>Marietta & Cincinnati—</i>		
1st. Mail Express.....	8.10 A. M.	10.05 A. M.
2d. Accommodation.....	3.30 P. M.	5.45 P. M.
<i>Cincinnati, Wilmington and Zanesville—</i>		
1st. Mail Express.....	9.45 A. M.	8.00 A. M.
2d. Accommodation.....	5.50 P. M.	6.45 P. M.
<i>Ohio & Mississippi—</i>		
1st. Mail Train.....	7.00 A. M.	10.05 P. M.
2d. Aurora Accom.....	3.15 P. M.	7.55 A. M.
3d. Express Train.....	7.20 P. M.	8.28 A. M.
<i>Indianapolis & Cincinnati—</i>		
1st. Mail.....	5.50 A. M.	9.45 A. M.
2d. Accommodation.....	2.45 P. M.	5.40 P. M.
3rd. Chicago Express.....	5.00 P. M.	12.30 A. M.
<i>Kentucky Central—</i>		
1st. Express.....	6.38 A. M.	10.44 A. M.
2d. Accommodation.....	2.24 P. M.	7.10 P. M.
<i>Cincinnati & Chicago Air Line—</i>		
1st. Mail.....	7.30 A. M.	9.15 A. M.

Change of Time for Opening and Closing
the Post-office.

POST-OFFICE, CINCINNATI, NOV. 2, 1861.
IN CONSEQUENCE OF A CHANGE
of Running Time on the Railroads throughout the country, the hours for opening and closing the Post-office, on and after MONDAY (4th) next, will be 8 o'clock A. M. and 6 o'clock P. M.
The Great Eastern Through Mail, by the L Railroad, will leave at 10 o'clock A. M. The press will leave the Depot over the Cincinnati Dayton R. R.
A schedule of the time for opening and closing the different Mails will be published as soon as practicable.
J. O. BAUM, POST MASTER

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANA- POLIS AND CINCINNATI SHORT-LINE



SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily for the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T., 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M. Chicago at 6:00 A. M., connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars. Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent,
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OHIO & MISSISSIPPI RAILROAD.

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Through without Change of Cars.

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Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.

RETURNING.—Mail Train Leaves East St. Louis, (Sundays excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M. arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office No. 5 East Third street; No. 1 Burnet House, corner office; north-west corner of Front and Broadway; Spencer House Office; and at the Depot, corner of Front and Mill Streets.

G. B. McLELLAN, Gen'l Superintendent
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November 11th, 1861.

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1861. 1861
FAST TIME.
LITTLE MIAMI
(AND)
COLUMBUS AND XENIA
AND
CINCINNATI, HAMILTON & DAYTON
RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Eaton, Richmond, Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Ohio, and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express.—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh; via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation.—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation.—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Richmond, Indianapolis, and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation.—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express.—From Cincinnati, Hamilton and Dayton Depot.—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,
General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

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Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

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MACHINE, have introduced a new style, working upon the
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The elegance, speed, noiselessness and simplicity of the
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The Railroad Record is a weekly paper of sixteen large quarto pages, devoted to the interests of RAILROADS and statistics of the growth and development of the country, and especially of the West. Established at about the period of the practical commencement of the Railroad system of the West, it has contained a complete history of all the great enterprises that have been begun and completed in the Western States. This history is continued from year to year by the publication of the Annual Reports of the roads, statistics of the productions of the country through which they pass and such other information as may from time to time be gathered, showing the resources of the country to furnish business for the roads. The bound volumes of the R. R. RECORD contain more information concerning the Railroads of the country than can be obtained from any other source.

The Tenth Volume of the RECORD opens at a time when our country is passing through the most severe ordeal to which it has ever been exposed and will cover an era of great and interesting changes.

As its circulation is mainly among Railroad managers, directors and stockholders, it is hoped that the patronage hitherto extended to the R. R. RECORD will be continued during the present year. The Editors will endeavor to make the present volume fully as interesting as any of the past. Railroad Directors and Superintendents will find its columns of great interest and it is hoped of practical utility also.

Manufacturers of articles designed for use on Railroads will find the RECORD a valuable means of advertising their establishments. In proof of this assertion the publishers need but refer to the fact that the columns devoted to advertisements have always been well filled with the cards of the best establishments in the country.

WRIGHTSON & Co., PUBLISHERS,
167 Walnut street, Cincinnati.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI;
THURSDAY, FEBRUARY 27, 1862.

[Second Article.]

RAILROADS OF THE WORLD.

CONTINENTAL RAILWAYS.

FRANCE.—At the end of 1860 the Minister of Agriculture, Commerce, and Public Works, reported the length of railways open as 5,778 miles, their cost having been £184,440,000, of which £32,440,000 had been contributed by the State and £152,000,000 by companies. The gross receipts for 1860 were £16,320,549. 430 miles were set down 1860 were £16,328,549. 430 miles set down for completion in 1861. At the end of September last the whole length of line opened was 6,147 miles, of which 4,347 miles belonged to the old, and 1,800 miles to the new *reseau*. The receipts for nine months had been £13,348,462, or at the rate of £17,797,949 per annum. The new *reseau*, now in course of execution, is to include 5,318 miles, at an estimated cost of £123,400,000, or £23,200 per mile. An expenditure of £14,000,000 was authorized last year. The lines of the Bourbonnais, 420 miles in extent, are reported to be nearly complete. The lines open in France on the 1st of January, 1858, were worked by 2,624 locomotives, and at the present time the number in use, doubtless, exceeds 3,000.

PRUSSIA.—By an official report, made up to the end of 1859, there were 3,162 miles of railway open and in use, the cost of which had been \$44,080,000, equal to £13,940 per mile. The gross receipts for 1859 were £5,399,440, and of this the working expenses absorbed 46 per cent. The average dividend paid was 5.36 per cent. 19,279,668 passengers were carried, exclusive of soldiers, and 11,904,761 tons of merchandise were also carried. The Berlin and Breslau, Eastern and Westphalian lines, have been constructed by the State. The eastern line, from Frankfort on the Oder to the Russian frontier, is 450 miles long, or, including the Danzig branch, 466½ miles. It is now under the consideration of the Government to construct a coast line from Danzig, *via* Stettin, to Hamburg. There is not, we believe, a railway tunnel in all Prussia.

AUSTRIA.—The principal railway undertaking in Austria is that of the South Austrian, Lombardo-Venetian, and Central Italy Railway Company, whose lines, it is true, extend somewhat beyond Austria. The whole length of this Company's line now open is 1,294 miles, including the Vienna and Trieste line and short branches, altogether 380 miles long. At a recent date, when 1,248½ miles had been opened, there were the Trieste line, just given,

the line from Pragerhof to Ofen, opposite Pesth, 205 miles long, besides the branch of 50 miles from Stuhlweissenburg to Comorn; 136½ miles in the Tyrol; 230 miles in Venetia; 156 miles in Lombardy, and 91 miles in Central Italy. At the end of 1860 the Company's capital expenditure had been £16,621,802, or £13,311 per mile. At the same time, 648½ miles of the Company's concessions remained to be completed.

The Emperor Ferdinand's Nordbahn and the Eastern State Railway extend north-easterly from Vienna, skirting the Silesian-Prussian and Russian frontiers, and reaching 121½ miles east of Cracow far into Galicia. The whole main line is 380 miles long, and, with the Bohm-Trubau and Troppan branches, is 464 miles long. Its cost has probably exceeded £8,000,000.

The Austrian State Railways, sold some years since to a French company, comprise three lines, one from a station on the Emperor's Nordbahn, 51 miles from Vienna *via* Prague to the Saxon frontier; another line (from another station on the Nordbahn), *via* Pesth to the Danube at Baciasch, and a third line from Vienna to Rzaab and Comorn. These three lines are 828 miles in length. The capital expenditure by the last report was £16,121,658.

The Theiss (Hungarian) lines are open from Czegled, 178 miles to Miskolez with branches to Arad and Grosswardein, 93 miles and 42 miles, respectively, in length, or 312 miles in all. The cost may be estimated at £3,000,000.

The line towards Munich, *via* Linz to Salzburg, is 195 miles long, the Passau branch being 51 miles more. The cost of these lines may be set down at £4,000,000.

Besides the main lines named there are 320 miles of short railways, and branches other than those already enumerated. The cost of these may be put at £2,000,000, upwards of 120 miles long horse railways, one of which, the Linz and Budweis, 80 miles long, was opened as early as 1828.

Thus we have for Austria, and including that portion of the South Austrian Company's line beyond the empire, 3,465 miles of railways, at a cost of £49,743,460.

OTHER GERMAN STATES.—It is difficult to separate the railways of the various German States from each other. Indeed, several of those already included in the mileage set down for Prussia are partly in Mecklenburg, Hanover, etc., the states and principalities in the German Confederation being intermingled, so to speak, like many of our counties, as, for example, East Barnet, on a peninsula (if we may employ the term) of Hertfordshire extending into Middlesex; Dudley, belonging to Worcester, but forming a sort of island by itself in Staffordshire; Hale's Owen, really in Staffordshire, and miles away from Shropshire, to which it legally belongs; Craike, in Yorkshire, and Holy Island, off the Northumberland coast, both belonging to Durham, etc., etc.

Early in 1859, Mr. J. Ward, her Majesty's consul at Leipzig, reported that 7,360 miles of railway were open for traffic in Germany, including Prussia and Austria. We have already seen that there are now at least 6,627 miles of railway in Austria and Prussia alone, but Mr. Ward reported but 4,144 miles three years ago, and exclusive of Hungary and Galicia. Allowing for these provinces, the remaining mileage of railways in the German States would not have fallen short of 2,700 miles. Taking *Bradshaw's Continental Railway Guide* (and excluding from the enumeration the Luxemburg railways, and also taking care that no portion of any line shall be included but once, although given in connection with two or more routes) we can make up 3,239 miles now open in the German States, exclusive of Austrian and Prussia, and this, possibly, does not cover the whole. This, too, although including Mecklenburg, is, of course, exclusive of Holstein and Schleswig, the railways of which are to be included with those of Denmark.

The Wurtemberg and Bavarian lines, it is hardly necessary to say, are numerous, long, and important, and these and the Saxon railways have been costly in construction. The line from Frankfort on the Maine, via Bamberg, Nuremberg, and Augsburg, to Munich, is 328½ miles long; the south-eastern extensions to the Tyrolese and Austrian frontiers are of considerable length; the line from Munich via Landsbut and Ratisbon to Nuremberg, with the branch to Passau, on the Austrian frontier, is 240 miles long; the line from Augsburg to Lindau, on Lake Constance is 121 miles long, and that from Augsburg to Ulm 53 miles; the Wurtemberg line from Bruchsal, near Carlsruhe to Friedrichshafen, on Lake Constance, and including the Heilbroun branch, is 201 miles long, and the Grand Duke of Baden's line, from Mannheim, up the Rhine, to Waldshut, near Zurich, is 215 miles long, including branches.

Estimating the 3,239 miles in question at £18,000 per mile, which can not be far from the real cost, we shall have £58,302,000 as the total investment in railways in Germany; and exclusive of Austria and Prussia. Mr. Ward estimated the investment at £120,000,000 for the 7,360 miles already referred to. Our present information goes to show that the mileage can not now be less than 9,866, and the capital expenditure £152,125,460, equal to £15,420 per mile.

IOWA R. R. LANDS.—From the Register's Report, we find that the number of acres of land certified to the State of Iowa, in accordance with the act of Congress, confirming lands upon certain railroads therein, to be 2,431,502.25, distributed to the four land grant roads as follows:

Burlington & M. R.	230,033.24
Cedar Rapids & M. R.	663,687.34
Dubuque & P.	1,147,481.07
Mississippi & M. R.	387,400.70

EXPLOSIVE PETROLIUM OILS.

The market is at present filled with *Petroleum oil*—sold as coal oil—ranging in density from 45° to 53° Baumé. This oil is sold without any regard to its density or explosive properties. The greater proportion of this oil is more or less explosive. Consumers are generally ignorant of this fact, and only find it out after some serious accident has occurred in their families. There should be some steps taken either by the press to post up consumers generally in the risks they are running in buying such oils and exposing their families to the danger of explosive compounds, or by the Legislature to require manufacturers and dealers to sell no oil standing above a certain density. Each dealer should have a hydrometer, and should know what he buys and sells; and if he sells any oil that explodes, should be made responsible for any accidents that may occur. As the matter now stands, more than half of the oil in market is more dangerous than camphene, for this reason: the consumer supposes he is buying an oil (and it is generally so represented to him) that will not explode, and handles it as such. The lamps used are constructed with large holes from the combustion chambers leading directly into the lamp, and are made expressly for non-explosive oils. Whenever an explosive oil is put in them there is nothing to prevent—especially as soon as the oil gets warm—an explosion. In many instances the vapors merely take fire, and with a slight puff or explosion extinguishes the lamp. In others the chimneys are blown into atoms, or the lamps are broken into fragments, and the burning oil scattered in every direction. If it happens to come in contact with combustible clothing it is sure to set it on fire, and often results in serious injury or death.

Numerous instances of such accidents are now occurring all over the country, and humanity demands that something should be done to suppress the sale of explosive oils to be burned in lamps fitted only for non-explosive oils. If explosive bodies are to be sold, lamps like those for camphene and burning fluid should be constructed for such purposes. A severe penalty should be imposed upon manufacturers and dealers who sell explosive oils to innocent consumers to burn in our present coal oil lamps.

But a few days ago, a wife and two children were burned to death by the exploding of Petroleum oil at Crestline, Ohio. Worley & Erskin, of Washington, Ohio, had a large hanging lamp in their store, filled with Pittsburgh oil, blown into atoms. Judge Williard, of Washington, Ohio, had a lamp, filled with Petroleum oil from the Pennsylvania Salt Manufacturing Company, explode. Several instances of the same kind have recently occurred in Mt. Vernon, Norwalk, Newark, and other places in Ohio.

RAILROADS OF THE STATE OF NEW YORK.

The Railroads of the State of New York are required by law to make to the State Engineer an annual report of their operations during each year. This report embraces full statistics of construction and operation of the roads, with all the details of the business classification of freights, &c. &c. The reports are made up to the uniform date of September 30. Hence they embrace corresponding periods of all the roads. These reports are embodied in one general report by the State Engineer and presented to the Legislature. From this report, extending up to Sept. 30, 1861, we make the following summary of the Railroads of this State. As it is very rare that all the roads fulfill the exact conditions of the law, it does not give the full number of miles in operation in the State; but the results, as showing the actual operations of those roads which have reported, is an exceedingly interesting and valuable exhibit:—

STOCK AND DEBTS.		
	Sept. 30, 1861.	Sept. 30, 1862.
Capital paid in.....	\$2,445,253 51	\$76,362,939 92
Funded debt.....	74,451,514 02	72,842,838 98
Floating debt.....	2,682,130 91	2,112,152 44

COST OF CONSTRUCTION AND EQUIPMENT.	
Of all the roads.....	\$138,066,753 72
Excluding city railroads.....	130,786,848 06
Length of roads in miles.....	3,475 79
Length of roads laid.....	2,727 64
Length of roads in operation, excluding city roads.....	2,654 12
Length of double track, including sidings.....	841 77
Length of branches laid.....	465 32
Length of double track on same.....	22 87
Length of equivalent single track, exclusive of city roads.....	3,984 08

PASSENGERS.	
Miles run by passenger trains.....	17,241,021
The same, excluding city roads.....	6,059,126
Number of passengers of all classes carried in cars.....	59,128,679
The same, excluding city roads.....	8,684,189
Number of miles traveled by passengers, or number of passengers carried one mile, city roads not included.....	337,954,686

FREIGHT.	
Number of tons carried.....	5,460,409 00

Classified as follows:

Products of the forest.....	540,079 60
Products of animals.....	1,077,070 00
Vegetable food.....	1,220,332 00
Other agricultural products.....	221,209 00
Manufactures.....	568,691 00
Merchandise.....	719,017 00
Other articles.....	1,133,691 00
Total tonnage.....	5,440,409 00

MAINTENANCE OF ROADWAY.

Allotted to passenger transportation.....	\$1,649,130 94
Allotted to freight transportation.....	2,426,461 86
Other costs not allotted.....	432,795 11
Total cost of maintenance of roadway.....	\$4,508,387 91
Total cost, excluding city roads.....	4,374,217 54

REPAIRS OF MACHINERY.

Allotted to passenger transportation.....	\$987,425 77
Allotted to freight transportation.....	1,627,197 75
Other costs not allotted.....	68,709 04
Total cost of repairs of machinery.....	\$2,683,332 56
Total cost, excluding city roads.....	2,624,536 35

OPERATING THE ROADS.

Allotted to passenger transportation.....	\$2,511,092 50
Allotted to freight transportation.....	3,900,188 02
Other costs not allotted.....	1,461,277 06
Total cost of operating roads.....	\$7,872,488 58
Total cost, excluding city roads.....	6,467,918 89

EARNINGS AND PAYMENTS.

From passenger business.....	\$9,533,934 82
The same, excluding city roads.....	7,364,160 57
From freight business, city roads excluded.....	13,009,783 99
From other sources.....	991,750 50
The same, excluding city roads.....	937,308 16
Total earnings.....	\$23,535,469 41
The same, excluding city roads.....	21,211,242 72

Payments other than for construction:

For transportation expenses.....	\$15,575,532 37
The same, excluding city roads.....	13,766,066 09
For interest.....	4,892,121 03
The same, excluding city roads.....	4,811,144 89
For dividends on stock.....	2,413,929 00
The same, excluding city roads.....	1,074,618 00
Amount carried to surplus fund.....	78,042 30
The same, excluding city roads.....	29,533 01

Total payments.....	\$22,954,624 70
The same, excluding city roads.....	20,581,358 80

Excluding the city railroads:

Average cost per mile of road.....	\$49,276 90
Average cost per mile of single track.....	32,827 35
Average expense is 64.87 per cent. of all the earnings.	

Excluding the city railroads the following deductions are given: Average cost per mile, \$49,276 90; do. per mile of single track, \$32,827 35; average number of miles traveled by each passenger, 38.91; average number of passengers in each train, 55.78; average number of miles each tun of freight was transported, 120.97; average number of tuns on each freight train, 82.84; aggregate movement of passenger trains is equivalent to passing 2,556 times over the road; average number of trains passing daily over the road, 12½; average cost per mile for maintaining roadway, \$1,648 08; average cost per mile for repairs of machinery, \$988.87; average cost per mile for operating road, \$2,436 93; ditto per mile for single track, for maintaining roadway, \$1,097 92; average cost per mile of single track for operating road, \$1,623 44; average sum per mile for conveyance of passengers, 2-14 cents; ditto for each tun of freight, 1-96 cents.

The Engineer calls attention to the fact that the Legislature has passed several acts authorizing the formation of Railroad Corporations without requiring compliance with the General Railroad act of 1850. Hence these statistics are not perfect.

The whole number of passengers carried on city railroads during the last year was 49,444,499; while upon the other roads the entire number was only 8,684,184. Amount received on city roads, \$2,260,774 25; on other roads, \$7,267,100 57.

MILITARY R.R. MEASURES IN THE SOUTHERN CONFEDERACY.

Notwithstanding the pretty effectual blockade of all avenues of communication between the North and South, we sometimes do see a stray Southern paper which has eluded all the vigilance of patrols on both sides of the line, and which gives us some insight into the proceedings and views of the Confederates. It seems that Mr. Davis has strongly urged the completion of the link of railroad between Danville, Va., and Greensboro', N. C., as a military necessity. For this purpose he urges an appropriation of \$1,000,000, to be expended as he may direct. It is also stated that he advises the appropriation of \$150,000 for the purpose of completing the Mississippi and Alabama River Railroad, so as to connect Selma, Alabama, with Meridian, Mississippi. The Richmond Examiner says of these recommendations: "Whatever appreciation the

country may have of the 'military necessity' of the otherwise questionable policy of aiding railroads, we believe that it will be surprised to hear of the extent to which this policy has been recommended to Congress. The precedent of Government aid to railroads is dangerous, difficult to be confined within proper limits, and liable to abuses and corruptions, especially in a legislative body which envelopes its proceedings with secrecy."

We apprehend that if these links of railroad communication are not completed till they are finished by the Rebel Congress, it will be many years before even a commencement will be made on them.

ST. LOUIS, ALTON & CHICAGO R. R.

This road is 220 miles in length from Joliet to Alton. But with the division of 37 miles from Joliet to Chicago, leased of the Joliet & Chicago R. R. Company, and the Alton & Illinoistown Railroad 25 miles from Alton to St. Louis, it constitutes a line of 282 miles from Chicago to St. Louis. It is the most direct route between these two great commercial centers, and as will be seen from the statement of earnings given below, is a very important thoroughfare. In its early history, the road was unfortunate. It is now in the hands of a receiver, the stock being cancelled. The road is charged with the following liabilities:

1st Mortgage Bonds.....	\$2,000,000
2d " ".....	1,535,000
3d " ".....	1,000,000
Total bonded debt.....	\$4,535,000
Floating debt.....	580,000
Total.....	\$5,115,000

The total liabilities of the road will thus be seen to be \$5,115,000 or \$23,250 per mile of road. This is not a large amount for a road of the length and importance of this line.

During the past year, the road earned as follows:

Gross earnings, 1861.....	\$1,098,464 89
Operating expenses.....	646,372 27
Net earnings.....	\$452,092 62

The operating expenses of this road will be seen to have been a little over 58 per cent. of the gross receipts of the year—a proportion somewhat higher than the average of the best managed roads, but yet by no means extravagant when it is remembered that its business is done in competition with other lines which combine both rail and water facilities. The net earnings, \$452,092 62, would be equal to interest on a capital of \$7,534,877, or what is more immediately practicable in this case, it would pay 6 per cent. interest on the whole amount of liabilities of the road and discharge \$145,192 of the floating debt—a statement which can not be otherwise than gratifying to the holders of the securities of this company. The gross earnings of the line were nearly \$5,000 per mile of road—a very fair average of gross receipts. The company run 51 locomotives, 9 baggage and 728 freight cars.

The receipts of the Road from the 5th December, 1859, to the 31st December, 1860, amounted to \$994,569 40, being five days less than thirteen months. The expenses of its operation and maintaining its ordinary repairs and Rolling Stock amounted to \$768,783 20, for the same period, or 77.52-100 per cent. of its receipts, being an excess of 18.68-100 per cent. over the average expenses of 1861. This large reduction is a gratifying proof of the altered condition of the Road and its Rolling Stock, and its improved management.

The Receiver, in his report of the condition of the Road, says:

The cost of Extraordinary Renewals, in 1860 and '61, amount to \$497,574 56, and the sum of \$317,017 34 has been expended in the extinguishment of liens and liabilities directed to be paid by the "Decree," besides other general expenses, inclusive of interest on loan from bondholders, making a total of \$814,591 80 met from earnings, less \$240,405 70 loan from bondholders and receipts from other sources, leaving the total balance of Assets in the hands of the Receiver on the 31st December, 1861, over and above current and outstanding liabilities, inclusive of cash and stores, of \$88,759 68, from which \$22,054 58 should be deducted for the interest of 1861 due on bondholders loan, now being paid leaving the Assets proper of the Receivership on the 31st December, 1861, \$66,695 10. Its liabilities outstanding under the Decree creating it, it is impossible to fix until the Commissioners appointed to examine and verify various claims file their award. They stand in the following order:

RECEIVER'S LIENS.

- No. 1.—Loan from bondholders, \$225,502 50.
- No. 2.—Counsel fees, of which \$18,080 89 are fixed, being the balance of amount allowed by your Board, and confirmed by the Court, to-wit: Stuart & Edwards, \$15,660 09, and George T. M. Davis, \$2,420 80.
- No. 3.—Brown, Bro's & Co.,—Ocean Bank, New York,—Clark, Dodge & Co., John J. Anderson & Co.,—and Bank of Bloomington, not to exceed \$181,800 66, and interest from the 1st March, 1859.
- No. 4.—Wood Accounts, now due, \$66,264 79.
- No. 5.—Joel A. Matteson, final and last payment of \$60,000.

If we fix the liabilities of all classes outstanding at \$580,000, and \$50,000 of Assets on hand as available in reducing them, about \$530,000 will have to be met by the future profits of the Road, or liquidated by arrangements between you and the creditors before redeeming the Road from the jurisdiction of the United States Court.

POWER TO MAKE RENEWALS.

The Decree of the 30th November, 1859, directs that \$50,000 be expended annually out of the net earnings of the Road in defraying the expenses of Extraordinary Renewals, as this appropriation was inadequate to meet the outlays of necessary improvements. I reported the facts to the Court, which were verified by John B. Turner, Esq., appointed by it as inspector, and I received its order directing the expenditure of \$400,000 in addition to the sums authorized in its decree, which, if

we include the present year (it being the third of the Receivership), gives the right to expend \$550,000 on permanent Renewals, \$497,574 56 of which has been expended, as shown by the general balance sheet, document "A," leaving \$52,425 44 as applicable to future Renewals.

NEW ROLLING STOCK.

New Rolling Stock added since the 3d December, 1859, to the 31st December, 1861:

14 Locomotives, costing (with interest).....	\$134,262 34
5 Passenger Cars and 1 Sleeping Car,.....	12,661 16
2 Mail and Express,.....	3,900 60
30 Box Freight Cars,.....	20,159 83
20 Cattle Cars,.....	13,113 74
20 Platform Cars,.....	7,067 50

\$190,439 60

which amount is included in the cost of permanent Renewals.

LEASE OF JOLIET RAILROAD.

The lease with the Joliet & Chicago Railroad Company expired on the 1st July last, and has been continued since as a verbal agreement, subject, however, to the conditions previously made. They are as follows, to-wit: 1st, \$1,666 66 per month, in consideration of the exclusive right to use and control its Road Stations and Depots, with the benefit of its local business.

2d, The division of the gross earnings of the Line from Chicago to Alton, in the proportion of 220 to 37, these numbers being the respective length in lines of each road.

3d, Thirty-five per cent. is retained by me out of the proportion of gross earnings on the Division above stated, for the operating and other expenses of the two Roads, besides \$3,333 33 per month is computed as compensation for use of Rolling Stock, divided in the proportion of 220 to 37.

4th, The Joliet and Chicago Railroad Company maintain at its own cost the repairs of its Track, Stations, Turn-outs and Depots.

The traffic over the Terre Haute Road, between Alton and East St. Louis, is fixed by an agreed tariff, and freight carried by the Alton Packet Company is adjusted on like conditions.

REMARKS.

The general business of the country during the preceding year being disturbed by serious causes, their unfavorable effects on the regular traffic of the Road has been considerable, which has, however, been made up by the large military transportation carried on between this city and St. Louis, and notwithstanding so many adverse circumstances, the result of its operations are gratifying, not only in the amount of its receipts, but in the decided improvement in its condition and of its several Departments.

Having received the Road in a condition of exhaustion, with its employees unpaid and in a state of insubordination, and its general credit and standing destroyed, I am gratified in being now permitted to assure you that all its serious embarrassments have disappeared, and it only needs the application of a com-

prehensive policy on the part of the bondholders in its reorganization to insure its continued prosperity and permanent stability as a property of value and importance.

The report of the Master Machinist contains some interesting details of the equipment of the road. The experience of this Company with wood and coal burning engines is of importance. We therefore give it in the language of Mr. De Clercy. He says:

In compliance with your directions, I have prepared a comparative statement of the cost of running nine wood-burning engines and the same number of coal-burners, to-wit:

Total number of miles run by nine wood-burning engines,.....	249,882	Cost. \$53,047 32
Total number of miles run by nine coal-burning engines,.....	279,482	49,953 34
Total cost per mile of wood,.....	22	26-100 cts.
Total cost per mile of coal,.....	17	87-100 "

Difference in favor of coal..... 4 39-100 "

Showing the cost of wood over coal to be about 25 per cent., besides the average number of loaded cars hauled by the coal-burning engine is five cars in excess of the Swinburne engines; therefore twenty of the former have capacity to perform the service of twenty-seven of the latter, and taking the annual average cost of running the coal burning engine at \$5,550 48, as shown by the preceding statement, the annual gain over the "Swinburne engines" would amount to \$55,932 21.

After nearly two years' experience in the superintendence of my department, I am well convinced that, if your means had permitted, the substitution of first-class coal-burning engines for the engines we have been using, the gain made in their greater power to perform service and the economy of running them would have gone far towards earning their original cost.

HUDSON RIVER RAILROAD.

This Company does not publish an annual report as such for the benefit of its stockholders; but being required by law to make an annual statement of its business to the State Engineer of the State of New York, it makes this statement serve both purposes. From the sworn statement in the Engineer's office, we have prepared the following summary of the business of the company up to September 30, 1861.

The capital stock of the company, as allowed by its charter, is \$4,000,000. Of this the amount subscribed was \$3,770,926 59, and the total amount paid in was \$3,758,466 59. This is the amount reported in 1855, showing that no stock has been disposed of since that date. The total issue of shares at that date was 37,616, of which 184 shares were only part paid up. Of these, 30,623 were sold for cash, and \$3,062,300 were realized therefrom. The balance, or 6,993 shares, were issued as an interest dividend in stock.

The funded debt of this company, by the present report, is \$9,137,000. Besides this,

there are mortgages to the amount of \$226,750 given for real estate purchased in the city of New York in 1860. In 1856 the funded debt amounted to \$8,842,000. At which sum it remained until 1860 when it was reported at \$9,107,000. The increase of funded debt within the last two years has therefore been \$295,000; adding to this the real estate mortgages of 1860 we find the total increase of funded liabilities for two years has been \$521,750.

The floating debt of the company, as given in the present report, is \$773,411 27. That of last year was \$182,106 10, showing an increase in this dangerous item of railroad statistics during one year to have been \$591,305 17. The gradual progress of the liabilities of the company, for the past ten years, is shown as follows:

FUNDED AND FLOATING DEBT.	
Total liabilities, 1852,.....	\$7,002,985 42
" " 1853,.....	8,344,339 26
" " 1854,.....	8,933,604 05
" " 1855,.....	9,271,362 74
" " 1856,.....	9,241,111 16
" " 1857,.....	9,295,151 51
" " 1858,.....	9,297,403 04
" " 1859,.....	9,256,654 35
" " 1860,.....	9,289,100 20
" " 1861,.....	9,910,411 27

In 1852, the road was not fully opened.

It will thus be seen, that while there has been a steady increase in the liabilities of the company during all this period, yet the increase of the present year has been greater than that of seven years from 1854 to 1860 inclusive.

The average rate of interest paid on the funded debt is 6.9 per cent. the same as reported for several years past.

The following is the summary of the cost of road and equipment, as given in the statement of the company:

COST OF ROAD AND EQUIPMENT.	
	By last report. By present rep.
For graduation & masonry,.....	\$5,416,827 43 \$5,446,232 72
For bridges,.....	264,240 13 266,333 55
Superstructure, including iron,.....	2,308,341 78 2,314,471 99
Passenger & freight stations, buildings and fixtures, engines and car houses, machine shops, machinery and fixtures,.....	1,017,163 77 1,062,842 91
Land, land damages & fences,.....	903,260 87 911,224 41
Locomotives, and fixtures and snow-plows,.....	535,103 12 538,330 17
Passenger and baggage cars,.....	265,323 53 284,202 73
Freight and other cars,.....	380,946 05 472,112 65
Engineering and agencies, ...	708,238 82 708,238 82
Total cost of road & equip'm't,.....	\$11,500,445 50 \$12,049,599 95
Increase in 1861,.....	249,154 45

The road is 144 miles in length from New York to East Albany. Of which, 115.068 miles on double track. The cost per mile of road will thus be seen to have been \$83,677. The weight of rail used on the line is 70 lbs. to the yard. The number of engine houses and shops, 11. The equipment of the road consists of 57 locomotives on main line and 4 on Troy and Greenbush leased line, 109 first class passenger cars on main line and 2 on Troy and Greenbush line, 6 second class and emigrant cars, 33 baggage and express cars on main line and 2 on Troy and Greenbush line, and 653 freight cars.

The following are the details of the year in passenger and freight traffic, including mileage of cars and passengers, and rates of speed, etc.:

DOINGS OF THE YEAR IN TRANSPORTATION, AND
TOTAL MILES RUN.

Number of miles run by passenger trains.....	606,836
Number of miles run by freight trains.....	509,922
Number of passengers (all classes) carried in cars, 1,501,242	
Number of miles traveled by passengers, or number of passengers carried one mile.....	54,406,307
Number of tons (2,000 lbs) of freight carried in cars.....	370,098
Total movement of freight, or number of tons carried one mile.....	42,834,771
Average rate of speed, adopted by ordinary passenger trains, including stops, (miles per hour),	29
Rate of speed of same when in motion.....	34
Average rate of speed adopted by express trains, including stops.....	37
Rate of speed of same, when in motion.....	43
Average rate of speed adopted by freight trains, including stops.....	26
Rate of speed of same, when in motion.....	16
Average weight, in tons, of passenger trains, exclusive of passengers and baggage.....	110
Average weight, in tons, of freight trains, exclusive of freight.....	265

THE AMOUNT OF FREIGHT, SPECIFYING THE QUANTITY IN TONS.

Of the products of the forest.....	7,033
Of animals.....	150,793
Of vegetable food.....	54,822
Other agricultural products.....	18,814
Manufactures.....	54,607
Merchandise.....	71,487
Other articles.....	12,512
Total.....	370,098

THE RATE OF FARE FOR PASSENGERS, CHARGED FOR THE RESPECTIVE CLASSES PER MILE.

For first-class through passengers.....	1.985
For first-class way passengers.....	2.228
For emigrant through passengers.....	715

The operating expenses of the road have been as follows:

EXPENSES.	
<i>Of maintaining the road or real estate of the Corporation</i>	
Repairs of road-bed and rail-way, exclusive of iron.....	\$178,899 87
Cost of iron used in repairs.....	87,957 05
Repairs of buildings.....	26,919 01
Repairs of fences and gates.....	1,866 64
Taxes on real estate, for schools, highways, town, city and county assessments.....	33,977 52
Total.....	\$334,630 09
Allotted to passenger traffic.....	181,701 08
Allotted to freight traffic.....	152,929 01
<i>Of repairs of machinery.</i>	
Repairs of engines and tenders.....	\$70,433 33
Repairs of passenger and baggage cars.....	44,309 94
Repairs of freight cars.....	26,919 84
Repairs of tools and machinery in shops.....	5,629 42
Incidental expenses, including oil, fuel, clerks, watchmen, etc., about shops.....	10,920 71
Total.....	\$163,325 24
Allotted to passengers.....	91,313 39
Allotted to freight.....	72,011 85
<i>Of operating the road.</i>	
Office expenses, stationery, etc.....	\$2,392 81
Agents and clerks.....	75,803 20
Labor, loading and unloading freight.....	46,729 79
Porters, Watchmen and Switch-tenders.....	79,591 43
Wood and Water-station attendance.....	16,136 71
Conductors, Baggage and Brakeman.....	52,645 36
Engineers and Firemen.....	51,711 87
<i>Fuel for Locomotives, Cost and Labor of preparing for use.</i>	
Wood.....	127,591 36
Coal.....	49,194 57
Oil and Waste for Engines and Tenders.....	11,927 74
Oil and Waste for Freight Cars.....	3,947 30
Oil and Waste for Passenger and baggage Cars.....	2,497 65
Loss and damage of goods and baggage.....	15,918 82
Damage for injuries of persons.....	16,373 30
Damage to property, including damages by fire and cattle killed on road.....	859 94
General superintendence.....	7,093 58
Contingencies, T. & G. R. R. hauling cars in city N. Y., Telegraph, fuel and oil for stations, Ferry Boats &c.....	322,745 62
Total.....	\$879,631 05
Allotted to Passengers.....	448,844 65
Allotted to Freight.....	430,786 40

The earnings and cash receipts of the road have been as follows:

EARNINGS.	
<i>Cash Receipts and Payments.</i>	
1st. Earnings, From Passengers.....	\$1,037,655 88
From Freight.....	892,570 22
From other sources.....	58,767 64
Total.....	\$1,989,013 74

2d. Receipts From Passengers.....	1,037,655 88
From Freight.....	792,874 76
From Telegraph.....	1,877 82
From Rents.....	17,217 87
From Mail service.....	33,400 00
From Miscellaneous.....	7,291 95
Total.....	\$1,889,318 22
3d. Payments other than for Construction....	
For Transportation Expenses.....	1,422,552 82
For interest.....	695,547 99
Total.....	\$2,118,100 81

From the above it will be seen that the cash receipts are nearly \$100,000 less than the earnings. As the report gives no explanation of this missing sum, it is to be presumed that it is the shape of accounts not yet collected, and in that it will appear in next year's accounts.

The operating expenses of the road bear an unusually high per centage to the gross earnings, being 71 per cent of the whole amount. This is too high a rate for even a company placed in the position of this one. The managers should devote their attention to a reduction of this enormous rate of expenses. The net income of the company applicable to the payment of interest and dividends, after deducting transportation expenses and assuming that all the earnings will be collected, will be \$566,460 92. As the payment of interest on the funded debt is reported at \$695,547 99, it will be seen that there will be a deficit of \$129,087 07, even under the most favorable circumstances, of supposing the uncollected earnings to be all collected. We must admit that this is not a very flattering statement to the Stockholders.

The gross earnings of the road having been \$1,989,013 74, and the number of miles operated, including the six miles leased of the Troy and Greenbush Railroad Co., being 150, it will be seen that the gross earnings have been \$13,260 per mile of road. That a road earning so enormous a revenue per mile is still unable to pay the interest of its bonded debt, is really a very grave matter and a fact which we doubt not the managers were compelled unwillingly to admit.

Accidents on the road. In the report of accidents which have occurred during the year it is stated that not a single passenger has been killed and but two injured. Of employees, four have been killed and four injured. Of persons neither passengers nor employees, twelve have been killed and sixteen injured, making a total of 16 killed and 22 injured.

The following are the names of the officers of the Company:

Directors:—Sam'l Sloan, Brooklyn; D. Thos. Vail, Troy; James Boorman, Edward Jones, E. H. Miller, M. H. Grinnell, W. H. Hays, J. David Wolfe, J. Boorman Johnston, H. A. Smythe, New York; William Kelly, Rhinebeck; Erastus Corning, Albany; Robert P. Getty, Yonkers.

Officers:—Samuel Sloan, *Pres't*; C. C. Clark, *Treas.*; T. M. North, *Sec'y*; A. T. Smith, *Superintendent*; F. A. Utter, *Engineer*.

NORTH PENNSYLVANIA RAILROAD
COMPANY.

The stockholders of this road held their annual meeting on the 15th ult. at the office of the Company, Walnut-street above Fourth. John E. Addicks, Esq., was chosen President, and Edward Armstrong, Esq., appointed Secretary.

Mr. F. A. Comly, President, read the annual report of the Managers.

We glean the following from it:

The total gross earnings for the year were.....	\$364,225 46
The total expenses, including all renewals and repairs.....	162,101 63
Net earnings for the year.....	\$202,123 83
As compared with the fiscal year ending Nov. 30th, 1860, the gross earnings have decreased.....	\$23,396 77
Expenses have decreased.....	14,566 68
Decrease in net earnings.....	\$10,830 09

The interest chargeable to the business of the year is:

Six per cent. coupons.....	\$150,000 00
Ten per cent. coupons.....	35,450 00
Ground rents and interest on mortgages.....	5,384 00
Interest on floating debt.....	10,127 88
Total.....	\$200,962 55

Since the 1st of July the net earnings of the road have been applied to the liquidation of the floating debt. The following statement exhibits the financial condition of the Company, as per Treasurer's statement on the last day of the fiscal year:

Cash on hand.....	\$20,795 62
Sundry accounts.....	12,489 97
Total cash assets.....	\$39,285 59
LIABILITIES.	
Bills payable.....	\$22,820 00
Sundry accounts.....	14,678 13
Balance of coupons.....	1,052 50
Total.....	\$38,550 63

Balance of cash assets..... \$734 26

Thus commencing the present fiscal year practically clear of floating debt. The interest account for the fiscal year just commenced will be:

Six per cent. coupons, July 1, 1862.....	\$75,000 00
Ten per cent. coupons, Oct. 1, 1862.....	18,000 00
Six per cent. coupons, Jan. 1, 1863.....	75,000 00
Ground rents and mortgages (say).....	5,500 00
Interest on \$248,500 of scrip.....	14,910 00
Total.....	\$188,410 00

The stockholders and others, interested in the road, are no doubt agreeably surprised to find the Company in such a prosperous condition as exhibited by the above statements. Much credit is due Franklin Comly, Esq., the efficient President of the road, for the favorable and prosperous condition in which the Company is placed. Mr. Comly was re-elected President, and the following gentlemen Directors, for the ensuing year: John Brock, Algerton S. Roberts, J. Morris Waln, Elwood Shannon, William L. Hirst, John Jordan, jr., J. Gillingham Fell, William C. Ludwig, Edward C. Knight, Alfred Hunt.—*Legal and Insurance Journal, Philadelphia.*

SUGAR RIVER VALLEY RAILROAD.—The following officers and directors have been elected for the ensuing year:

President.—Simon Mills.

Vice-President.—James Campbell.

Treasurer.—David Atwood.

Executive Committee.—W. F. Porter, J. Campbell, L. W. Bardon.

Directors.—Simon Mills, Madison; I. N. DeForrest, Madison; W. F. Porter, Madison; H. N. Wood, Portage City; Wm. Abeel, Janesville; H. T. Moore, Broadhead; James Campbell, Albany; J. H. Warren, Albany; C. F. Thompson, Albany; E. Bowen, Albany.

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.	
Atlantic and Great Western.....	N.Y. & Pa.		48	\$	\$											
Baltimore and Ohio.....	Md.	380		13,111,800	10,781,833	566,070	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5		1825		
do do										"	2,500,000	6		1820		
do do										"	700,000	6		1875		
do do										"	1,125,500	6		1867		
do Washington Branch.....	Md.	70		1,650,000						"	1,000,000	6		1866		
Bellefontaine and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	139,129	314,090	8,793	Dec. 1860.	1st Mortgage.....	791,000	7		1870		
do do										2d	100,000	7				
Buffalo and State Line.....	N.Y. & Pa.	121	68	1,350,950	1,049,000	27,545	911,019	493,047	June 20, 1860							
do do																
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000					
Camden and Amboy.....	N. J.	96		3,798,400	8,820,000		1,997,065	733,950	Dec. 31, 1860	1st Mortgage.....	3,700,000	6		1864		
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7		1861		
do do										2d	800,000	7		1864		
do do										2d	80,000	7		1865		
do do										3d	950,000	7		1865		
do do										4th	1,365,000	7		1866		
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7		1865 & 1870		
do do										2d	600,000	7		1875		
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7				
do do										2d	1,535,000	7				
do do										3d	1,000,000	10				
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000					
do do										2d	200,000					
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	80	Feb. & Aug.		
do do										2d	3,000,000	7	41 1/2	Feb. & Aug.		
do do										2d	2,000,000	6	11	May 1.		
Chicago and Rock Island.....	Ills.	53 1/2	175	5,603,000	1,397,000		1,164,018	455,963	June 10, 1861	1st Mortgage.....	2,000,000	7		1870		
Chicago, Burlington and Quincy.....	"	61 1/2	138	4,689,310	4,814,515		1,514,423	761,830		Cons. 1st Mort. S. F. 2d S. F.	2,172,000	7	94	1869		
do do										1st Mor. Chi. & Aur.	300,000	7		1867		
do do										2d	303,000	7		1869		
do do										1st "Cent. Mil. Tract	390,000	7		1864		
do do										2d " " "	245,000	8		1868		
Chicago, Iowa and Nebraska.....			82	No report												
Cincinnati and Chicago Air Line.....	Ind.															
do do																
Cincinnati, Hamilton and Dayton.....	Ohio.		60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000			1867		
do do										2d	950,000			1860		
Cincinnati Wilmington & Zanesville ..	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000					
do do										2d	532,000					
do do										3d	101,000					
do do										Income.....	305,509					
Cleveland and Mahoning	Ohio.		69 1/2	1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7				
do do										2d	400,000	7				
do do										3d	344,000	8				
Cleveland and Pittsburgh.....	Ohio & Pa.	6	106	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	13 1/2	1860		
do do										2d " M. L. or 1st Ex.	1,125,000	7		1873		
do do										3d 2d Ex.	1,165,000	7		1865		
do do										4th 3d Ex.	1,134,000	7				
Cleveland and Toledo.....	Ohio.	45 1/2	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	339,000	7		1867		
do do										1st " " 2d Div.	263,000	7		1872		
do do										2d " " "	265,000	7		1862		
do do										1st " Tol. Nor. & Cleve	521,000	7		1863		
do do										2d " " "	293,300	7		1861		
do do										Junction Income..	44,500	7		1862		
do do										C. & T. Income..	300,000	7		1864		
Cleveland, Columbus and Cincinnati..	Ohio.	109	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890		
Cleveland, Painesville and Ashtabula..	"		98 1/2	3,000,000	1,602,000	none	1,063,403	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7		1861		
do do										2d	303,000	7		1862		
Columbus and Xenia.....	Ohio.		54 1/2	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700			1860 & 1866		
Columbus, Piqua and Indiana.....	"		103	In hands of Receiver.	2,512,000		292,267	375,002								
Dayton and Michigan.....	"		142	2,176,000						1st Mortgage.....	300,000	8				
do do										2d	2,212,000	8				
Dayton and Western.....	Ohio.		38	307,240	716,000	80,845	62,025	3,365	Aug. 31, 1860	1st Mortgage.....	300,000	7		1875		
Detroit and Milwaukee.....	Mich.		186	No report						1st Mortgage.....	2,500,000	8		1866		
do do										2d	1,000,000	8				
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.		111	No report												
Dubuque, Marion and Western.....	"		51	No report												
Eaton and Hamilton.....	Ohio.		36	469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734					
Evansville and Crawfordsville.....	Ind.		132	986,061	1,219,100	249,868	124,140									
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000					
do do										2d	180,000					
Galena and Chicago Union.....	Ills.		70	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000	100	1862 & 1863		
do do										2d	1,520,000	99		May 1, 1875		
Great Western	Ills.		175	1,600,000	2,391,000		425,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10				
do do										1st " E. D.	1,350,000	7				
Green Bay, Milwaukee and Chicago...	Wis.		54	400,000	No report	75,000	63,141	13,573								
Greenville and Miami.....	Ohio.		32	300,000	473,000											
Hannibal and St. Joseph.....	Mo.		206	1,041,000	10,534,000	220,306	996,907	512,933	Sept. 1, 1860.	Land Mortgage...	5,000,000		67 1/2			
Hartford and New Haven.....	Conn.		62	2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	Mortgage Conv.....	1,334,000			1873		
Hudson River.....	N. Y.		37	144	3,758,460	9,107,000	182,106	2,047,145	Sept. 30, 1860	1st Mortgage.....	4,000,000	6		1869 & 1870		
do do										2d	2,000,000	7		1840		
do do										3d	1,840,000	7		1875		
Illinois Central.....	Ills.		65	455	15,654,980	13,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000	7		1868	
do do										Construction.....	12,885,000	7	93	1875		
do do										"	4,115,000	6		1875		
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	Debentures.....	427,740	7				
do do										1st Mortgage.....	600,000	7				
do do										2d	578,000	10				
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,284	140,689	448,858	230,834		Income.....	38,700	10		1866		
do do										1st Mortgage.....	500,000	7				
do do										2d	400,000	7				
Indianapolis Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort...	200,000	7				
do do										1st Mortgage.....	649,984	7				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d	314,000					
Iron.....	Ohio.		13	118,865	50,000		No report									

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000		302,005	122,797	Dec. 31, 1860.	1st 289,000		7		1861	
do										2d 392,000		7		1873	
Kentucky Central (Covington and Lexington).....	Ky.		90	Sold out under mortgage	2,930,000	337,532	426,408	237,534		1st Mortgage..... 160,000		6			
do										1st 260,000		7			
do										2d " Conv. 1,000,000		7			
do										3d " 600,000		7			
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiver.						1st Mortgage E. D. 903,000					
do										2d " E. D. 1,000,000					
do										1st Land Grant W D 4,000,000			12		
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report								
Lexington and Frankfort.....	Ky.		29	514,433	130,000		108,944	43,267	June 30, 1861	1st Mortgage..... 130,000		6			
Little Miami.....	Ohio.		65				1,330,050	529,981	Jan. 1, 1862	1st Mortgage..... 1,300,000		6		1883	
Louisville and Frankfort.....	Ky.		65	1,169,59	384,519		45,910	98,679	June 30, 1861	City Loan..... 174,000					
do										1st Mortgage..... 248,000					
Louisville and Nashville.....	Ky.		268	5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st Mortgage..... 2,000,000		7			
do										1st " Lebanon Br. 400,000					
do										1st " Memphis Br. 500,000					
Louisville, New Albany and Chicago..	Ind.		288	2,800,000	3,000,000	200,000	645,827	371,402							
do															
do															
Madison and Indianapolis.....	Ind.		87	1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage 600,000		7		1861	
Marietta and Cincinnati.....	Ohio.		203	8,561,213	190,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv 2,500,000		7		1868	
do										2d " 2,000,000		7			
do										3d " 1,500,000		7			
do										Sterling Income... 333,000		4			
Michigan Central.....	Mich.		54½	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	Domestic 928,617					
do										1st Mortgage Sterling 467,489		6		1872	
do										1st " Conv. 500,000		8	100	1869	
do										1st " unconv. 250,000		8		1860	
do										1st " Dollar Conv. 2,500,000		8		1869	
do										1st " S. F. Conv. 4,153,000		8		1882	
Michigan South'n & North'n Indiana	Mich &		23½	9,018,200	9,714,704	437,886	2,075,459	1,030,829	Mar. 31, 1861.	Mort. Mich. So. 991,000			90	1860	
do										" Nor. Ind. 985,000			88½	1861	
do										" Goshen Line. 1,168,000			88½	1868	
do										S. F. Toledo 2,850,000			85	1885	
do										2d Mortgage 2,465,000				1877	
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182		1st Mortgage..... 400,000		8			
do										2d " 200,000		8			
Milwaukee and Horicon.....	Wis.		42	1,101,200						1st Mortgage..... 420,000		8			
do										2d " 600,000		8			
Milwaukee and Prairie du Chien....	Wis.		20½	4,944,000	2,556,000		882,186	439,943	Dec. 31, 1860.	1st Mortgage..... 2,556,000		7		1891	
Milwaukee and Western.....	Wis.		192	No report											
Mississippi and Missouri.....	Iowa,		55	No report											
do										1st Mortgage Conv. 1,000,000		7			
do										2d " S. F. 400,000		8			
do										Oskaloosa Div. 1,425,000		7			
do										Land Grant..... 7,000,000		7			
New Jersey.....	N. J.		33	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage..... 711,000					
New Jersey Central.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.						
New York and Erie Pref.	N. Y.		58½	Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860.	1st Mortgage..... 3,000,000			105		
do			34½							2d " 4,000,000					
do										3d " 6,000,000				96	
do										4th " 4,900,000				84	
do										5th " 1,792,500				76	
New York and Harlem Pref.	Conn.		30	5,717,190	6,055,752		1,142,851	433,716	Sept. 30, 1860.	1st Mortgage..... 2,950,000		7	101	1873	
do			12½							2d " 1,000,000		7		1864	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage..... 912,000		7		Dec. 1, 1866	
do														Oct. 1, 1875	
do										787,000		6		May 1, 1883	
New York Central.....	N. Y.		84½	24,000,000	14,613,005	none.	7,369,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H. 7,925,000		6	98	1885	
do										Mortgage..... 3,000,000		7	104½	June 15, 1864	
Northern Central.....	Md.		138	2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction..... 2,065,500		6			
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan..... 4,350,000		6			
Ohio and Mississippi, Eastern Div....	Ohio & Ind.		192	Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage..... 2,193,500					
do										3d " 316,995					
do										Construction..... 4,637,920					
do										Income..... 3,591,125					
Ohio and Mississippi, Western Div....	Ills.		148		3,292,403		No report								
Pacific.....	Mo.			3,199,662	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	State Loan..... 7,000,000		6	38		
do										" S. W. 2,800,000		6			
do										Construction..... 4,500,000		6			
Pennsylvania.....	Pa.		359	13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv. 4,900,000		6		1888	
do										2d " 2,319,000		6		1875	
do										2d " Sterling. 1,957,440		6		1875	
do										State Works..... 7,200,000		5			
Peru and Indianapolis.....	Ind.		74	1,100,000	820,000	80,000	No report								
Philadelphia, Wil. and Baltimore....	Del.		98	5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage..... 2,300,000		6		1884	
do										Improvement..... 119,000		6		1863	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		467	Sold for Floating Debt.	10,192,155	1,757,273	2,355,353	761,555	June 30, 1861	1st Mort. O. & P. 1,000,000		7		1865	
do										2d " 750,000		7		1866	
do										1st " O. & I. 1,000,000		7		1872	
do										2d " 380,000		7		1873	
Pittsburgh and Connellsville.....	Pa.		49	1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n. 500,000					
Racine and Mississippi.....	Wis.		104	2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.						
do															
Sandusky, Dayton and Cincinnati. .	Ohio.		170	2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage..... 125,000		10		1856	
do										" 997,000		7		1866	
do										" 1,000,000		7		1875	
Sandusky, Mansfield and Newark....	Ohio.		125	848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage..... 1,290,000		7		1886	
Scoto and Hocking Valley.....	Ohio.		56	403,975	500,000	100,000	110,200	53,100							
Springfield, Mt. Vernon & Pittsburgh..	Ohio.		50	1,000,000	1,650,000	200,000				1st Mortgage..... 500,000					
do										2d " 450,000					
Stevensville and Indiana.	Ohio.			No report						1st Mortgage..... 1,500,000		7		1870	
do										2d " 900,000		7		1865	
Terre Haute, Alton and St. Lous....	Ills.		208	No report						1st Mortgage Conv. 1,000,000		7	75	1862	
do										2d " Conv. 2,000,000		7		1868 & 1870	
do										1st " Bel. & Ill. 517,000		7		1873	
Terre Haute and Richmond.....	Ind.		100	1,381,430	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage..... 230,000		7	75½	1866	
Toledo, Wabash and Western.....	Ohio & Ind.		52	2,123,500	5,996,049	52,389	233,545			1st Mortgage..... 3,400,000		7		Aug. 1, 1865	
do			243							2d " 2,500,000		7	45	Nov. 1, 1879	
do										Mort. Coupons.... 96,049		7		1860 to 1865	

BOSTON AND PROVIDENCE R.R.

The annual report of this Company, submitted to the stockholders at their meeting January 8, embraces the details of its operations for the year ending November 30, 1861. The Directors say:

In submitting their annual report, the Directors annex tables and statements which are intended to show in the clearest form the operations of the Road for the last year, and the present condition and value of the corporate property. It will be observed that no change has been made in the valuation; that the property, as estimated, exactly represents the capital, and that to effect this, care has been taken to make no over estimates.

It will also be observed that the principle which has been adopted and rigidly adhered to for the last few years, of reserving a certain amount annually as a fund for renewals, has been productive of the desired effect in exhibiting a great uniformity in the expense account from year to year.

The gross receipts for the last year were.....\$588,871 49
The expenses in operating the Road, including interest paid, were.....\$285,108 73
Paid for new locomotive.....8,000 00
" 20 new freight cars.....9,550 00
" new freight house.....7,000 00
Carried as a reserve to the several funds for renewals.....14,896 90
\$324,555 63

Leaving a balance of.....\$264,315 76

It will appear from the annexed comparative statement of the earnings and expenses for the last three years, that we have, in common with other similar corporations, experienced the effects of a partial derangement of the business of the community during the last year, but not to such an extent as to make it necessary to diminish our usual dividend.

Our Funded Debt has been reduced during the year by the sum of \$30,000 00. The amount still due, payable at various periods before 1868, is \$132,720.00.

The length of road owned by the company, as per their report, is 47 miles, of which 26 miles are double track and 21 miles single track. The company also own 7 miles of branches, single track, and 6½ miles of sidings. The weight of rail per yard on the main line is 56 to 60 lbs., and the weight of rail on the branch is 37½ to 60 lbs. per yard. The maximum grade on the main line is 34½ feet per mile for a distance of 26,700 feet. The maximum grade on the branch road is 52 27-100 feet per mile for a distance of 1,509 feet. The total rise and fall on the main line is 501 41-100 feet, which, if it were equally distributed, would give a grade of about 10 feet per mile on the whole line. The shortest radius of curvature on the main line is 1,900 feet, for a distance of 700 feet. The total length of straight line on main line is 35½ miles. The aggregate length of wooden truss bridges is 2,086½ feet; of other classes of wooden bridges is 1,520 feet. There are also 299 feet of iron bridges on this road.

The following are the details of operations for the year:

Miles run by passenger trains.....	250,873
" " freight trains.....	115,248
" " other trains.....	10,833
Total miles run.....	376,954
Number passengers carried in cars.....	1,013,533
" " one mile.....	13,314,545
" tons merchandise carried in cars.....	243,496
" carried one mile.....	7,877,680

The number of stations at which express trains stop on this road is 3, and the rate of speed on express trains is 29 miles per hour, including stops and detentions. The accommodation trains stop at 27 regular stations and 6 flag stations, and run at the rate of 22 miles per hour, including stops. The average rate of speed adopted on freight trains, including stops, is 12 miles per hour.

The estimated weight of passenger cars, not including passengers, hauled one mile is 9,545,328 tons. This is equal to about three-fourths of a ton per passenger, and is much less than the average of all the roads of the country. The estimated weight of freight cars, not including the freight, hauled one mile, is 12,379,928 tons, which is about one and two-thirds tons of cars to every ton of freight hauled.

The equipment of the road consists of 24 engines, 29½ passenger cars, 9 baggage cars, 199 eight wheel and 10 four wheel freight cars, and 20 gravel cars. The cost of fuel per mile run by engines during the year has been 9½ cents.

The financial condition of the company is as follows:

Capital stock.....	\$3,160,000
Funded debt.....	332,720
Floating debt.....	none

The report is signed by the following gentlemen as Directors: C. H. Warren, Joseph Grinnell, John Barstow, George W. Hallett, Samuel T. Dana, J. Huntington Wolcott, Christopher C. Chadwick.

ALLEGHENY VALLEY R.R.

The annual meeting of the stockholders of this Company took place at Pittsburgh in the early part of this month. We have not yet been favored with its report, but we learn that the following is the summary of its condition:

EARNINGS.	
From Passengers.....	\$61,330 98
From Freight.....	42,443 98
From Mail transportation.....	3,150 00
Gross earnings.....	\$106,924 96
EXPENSES.	
Conducting transportation.....	\$16,635 16
Maintenance of Way.....	17,160 81
Maintenance of Cars.....	3,870 81
Maintenance of Motive-power.....	8,676 26
Incidental expenses, machine shops.....	2,920 92
General expenses.....	3,331 84
Total.....	\$51,895 80
Bills payable.....	\$29,679 16
Book accounts, Dr.....	4,587 37
July, 1861, unpaid.....	3,745 00
January, 1862, unpaid.....	13,300 00
Due employees, &c.....	14,499 58
Total.....	\$58,811 11
Passengers.....	1860, 1861, \$60,694 10
Freight.....	38,103 28 42,443 98
Total.....	\$92,103 72 \$106,288 08
Expenses.....	49,180 78 51,895 80

A meeting of railroad managers was held in Washington to consult with the Secretary of War on the subject of Government transportation. Results said to be mutually satisfactory.

MONETARY AND COMMERCIAL.

Another week has gone by to the old tune of no changes in the money market. The same plethora of capital—the same scramble after first class paper, and the same shyness of all but the most undoubted names are the prominent features of the money market here. We may still quote first class paper as in demand at eight to ten per cent. and other grades at prohibitory rates. All this is apparent on the surface of the great ocean of life. The tide has run one way now for many months. But it must be a very superficial observer who does not remark the strong under current that has hitherto been running with the tide in the direction of general distrust, but now setting strongly towards the haven of restored confidence. The glorious successes of the Union arms—the occupation of Nashville in strong force—the general development of Union sentiment, long smothered in the hearts of the people of Tennessee, and their threats of vengeance against the political demagogues who have so long oppressed them—all tend toward one grand and important conviction, that a government as beneficent as ours is not to be destroyed by the hand of treason at this time. And with this growing conviction, with the certainty that justice and freedom shall triumph in the supremacy of constitutional law, comes confidence, at first modestly appearing only in the homes of the intelligent, but soon to march in triumph through the land. The news from Richmond is that there were no rejoicings over the inauguration of the Rebel President of the Southern Confederacy on February 22d. While, throughout the whole loyal portion of the country, old and young blessed the memory of the patriot warrior and statesman whose birth was that day celebrated. It would seem that the conviction of the hopelessness of the cause forced its way even into the inauguration and spectral despair, standing side by side with "his excellency," Jeff. Davis, made the hollow pageant a bitter mockery of disappointed ambition.

With the re-opening of Southern States in their present destitute condition, must come a vast improvement in general business. The markets of the south and indeed many at the north, are utterly depleted, although from different causes. And the supplying of these will give rise to considerable speculative feeling in all articles of merchandise.

Exchange remains steady at the following quotations:

	Buying.	Selling.
New York.....	par.	½ prem.
Philadelphia.....	par.	½ prem.
Boston.....	par.	½ prem.
Gold.....	2 to 2½ prem.	3 to 3½ "

It is stated in New York that there is an improved demand for the 7-3-10 Treasury Notes. Congress has delayed action on the Treasury Note legal tender bill. This is a great disappointment to the people who have

expected prompt action from their representatives.

General business reflects the influence of the late victories on the minds of the people—in increased prices for many staples thought to be in demand at the South. Flour has been in good demand at \$4 50 to \$4 55 for superfine. Wheat 98 cts. to \$1 00 for red. \$1 05 to \$1 10 for white. Corn 30 cts. Oats 28 to 28½. Barley 72 to 75 cts. Rye 52 to 53 cts. Whiskey 17 cts.

The *Price Current* foots up the Hog business of the West as follows:

Kentucky.....	134,510
Missouri.....	86,393
Iowa.....	119,047
Illinois.....	605,429
Indiana.....	284,982
Ohio.....	638,421

Total 1862.....	1,868,782
“ 1861.....	1,568,083

Increase..... 300,699

At places yet to be heard from there were packed last year 587,619.

New York, February 26.—Money market more active and firmer. Call loans are making at 6@7 per cent. First class paper quoted at 6½@7 per cent. Sterling Exchange dull at 114@114½ for Bankers' Bills. American Gold selling at 2½@3½ per cent. premium, closing at the inside rate. Government securities in fair request. 7 3-10 Treasury Notes selling at 99@99½. California Gold Bars heavy at 2½@3 per cent. prem. U. S. Demand Treasury Notes are in brisk request at ½@¾ per cent. prem.

The steamer Asia, to-day, for Liverpool takes out \$269,000 in specie.

Stocks irregular and dull, closing heavy; Ch. and R. I., 56½; C., B. & Q., 64½; M. & P. DuC., 20½; Do. First Preferred, 77½; G. & C. 68½; Ill. Scrip, 64½; M. S., 24; Do. Guaranteed, 48½; M. C., 54½; Hudson, 35½; Erie, 34½; Do. Preferred, 58½; Pacific Mail, 91½; T. & W. First Bonds, 77½; U. S. 6's, 81, Coupons, 92½; Do. Oregon War, 92; Tennessee 6's, 82½; Missouri, 54½; N. C., 52; California 7's, 67.

The Illinois Constitutional Convention adopted, in Committee of the Whole, the first section of the bank article. It is as follows:

SECTION 1. No bank or banking corporation, nor any association, or corporation with powers of circulation or deposit, or any banking powers whatever, shall hereafter be created in this State; nor shall the banks now existing be allowed to increase their circulation; and the auditor is hereby prohibited from issuing any more bills or notes to any bank, or to any person, or association of persons, formed, or to be formed, for the purpose of banking, under the provisions of the laws of this State, or otherwise; nor shall any bank or banking corporation, or any association or corporation, with powers of circulation or deposit, or any banking powers whatever, or any other corporation, make any assignment, transfer or conveyance, for the preference of creditors; nor shall any stockholder, or stockholders, now owning, or who shall hereafter own any stock in any such bank, corporation or association of persons, assign his, her, or

their shares of stock therein, or any interest in said shares to said bank, association or corporation, but all such assignments shall be void.

This section shall take effect and be in force immediately, as a portion of, and as an amendment to, the Constitution of this State; and the same shall be and remain in force as such, unless rejected by the people, upon the vote hereafter to be taken for or against the adoption of the same, as provided in this Constitution.

The earnings of the Toledo and Wabash Railroad for the first week of February were:

	1861.	1862.
Passengers.....	\$3,422	\$2,555
Freight.....	9,970	10,168
Total.....	\$13,352	\$12,724
Decrease.....		628

The receipts of the Chicago and North-Western Railroad for the week ending Feb. 7, 1862, were:

	1862.	1861.
Passengers.....	\$3,556 48	\$2,961 26
Freight.....	6,432 93	6,654 67
Express.....	201 75	1-2 81
Mail.....	423 95	334 16
Total.....	\$10,615 11	\$10,162 90
Increase.....		452 21

The Milwaukee and Prairie du Chien Railway earned the fourth week in January:

For passengers.....	\$2,072 86
For freight.....	19,100 26
For mails and rent.....	1,251 35

Total.....	\$22,424 47
Corresponding week 1861.....	9,192 92

Increase for the week..... \$13,231 55

The earnings for the month of January, 1862, are:

For passengers.....	\$15,126 35
For freight.....	64,478 03
For mails and rents.....	4,299 17

Total earnings for the month.....	\$83,903 55
Corresponding period in 1861.....	54,245 81

Increase of the month..... \$29,657 74

The Galena and Chicago road earned the first week of February:

1862.....	\$27,128	1861.....	\$19,509
Increase.....			\$7,619

Earnings by the Chicago, Burlington and Quincy Railroad line (310 miles), in the month of January, were, in

	1861.	1862.	Inc.
Freight.....	\$110,938 24	\$122,151 00	\$11,212 76
Passengers.....	32,900 89	27,276 70	5,624 19
Mails, &c.....	5,169 36	3,031 67	2,137 69
Total....	\$149,008 49	\$152,459 37	Inc. \$3,450 88

The receipts of the Harlem Railroad for the month of January are as follows:

January, 1861.....	\$103,494 63
January, 1862.....	110,922 75
Decrease.....	\$2,571 88

The Cleveland and Toledo Railroad earned, the first week of February:

First week, 1862.....	\$24,620
First week, 1861.....	18,054
Increase.....	\$6,566

The Galena and Chicago Road earned the second week in February:

1861.....	\$19,323	1862.....	\$27,740
Increase.....			\$8,417

The estimated earnings of the Cleveland and Toledo Railroad for the week ending Feb. 14, 1861 and 1862, are as follows:

	1861.	1862.
Total Passenger Receipts.....	\$6,093	\$6,062
Total Freight Receipts.....	11,622	18,210
Total Earnings.....	\$17,715	\$24,272
Increase.....		\$6,557

The following is an abstract of the 32d monthly report of the Central Ohio Railroad for December, 1861:

To balance, as per last report.....	\$72,089 20
EARNINGS.	
Passengers.....	\$18,590 59
Freights.....	31,176 03
Mail.....	2,290 60
Express.....	1,900 45
	\$54,337 67

EXPENSES.	
Transportation Department.....	8,302 17
Machinery.....	8,907 92
Fuel.....	4,641 36
Road.....	7,038 62
General Expenses.....	1,225 28

Total Working Expenses.....	\$30,412 36
Construction.....	3,261 67

Total Expenses.....	\$33,674 03
Balance on hand Dec. 31.....	46,293 36

The Michigan Central Railroad Company earned in the second week in February:

Second week, 1862.....	\$42,584 49
Second week, 1861.....	29,363 71

Increase..... \$13,226 78

The Chicago and Rock Island Railroad earned in the second week of February:

Second week, 1862.....	\$21,175
Second week, 1861.....	15,265

Increase..... \$5,910

The Michigan Southern Railroad earned in the same week:

1862.....	\$41,584
1861.....	29,363

Increase in 1862..... \$13,220

The following is the statement of the earnings of the Detroit and Milwaukee Railroad for the week ending Feb. 13, 1862, compared with the corresponding week last year:

For week ending Feb. 13, 1862.....	\$10,217 00
Corresponding week last year.....	5,734 73

Increase..... \$4,482 27

The following is a statement of the earnings of the St. Louis, Alton and Chicago Railroad, from Feb. 8 to Feb. 15, 1862, inclusive:

	1862.	1861.
Passengers.....	\$6,816 19	\$7,031 30
Freight.....	11,429 00	14,578 56
Sundries.....	855 73	855 83

Total..... \$19,100 92 \$22,515 69

Decrease in 1862..... \$3,414 77

Total this month to date... 34,638 16 40,894 99

Total since Jan. 1..... 102,267 95 122,426 46

The earnings of the Norwich and Worcester Road for January show a fair increase. The figures are:

Passengers.....	\$8,122 33
Freight.....	13,946 69

Total.....	\$22,069 01
1861.....	16,260 13

Increase..... \$5,808 88

The following are the Buffalo, New York and Erie Railroad earnings for the first half of February:

Fourteen days in Feb., 1862.....	\$31,100 99
Same fourteen days, 1861.....	17,751 23

Increase, 1862..... \$13,349 70

The receipts of the Great Western Railroad of Canada for the week ending Feb. 8, were:

1862.....	\$55,389 75
1861.....	41,227 12

Increase..... \$14,162 63

The receipts on the Grand Trunk Railroad for the week ending Feb. 8 were:

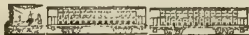
Week ending Feb. 8.....	\$75,492 61
Corresponding week la year.....	40,476 86

Increase..... \$35,020 75

CLEVELAND & PITTSBURGH RAILROAD.—The earnings of this road for the year ending Nov. 30, 1861, are as follows:

Freight	\$682,254 14
Passengers	376,936 48
Mails, Express, &c.	55,750 73
	\$1,114,941 40
Operating Expenses	616,335 41
Net Earnings	\$498,605 99

1861. EAST. 1862.
WINTER ARRANGEMENTS—TIME
CHANGED.



CENTRAL OHIO AND
STUEBENVILLE
SHORT LINE RAILROAD,
UNITED.

Connecting at Pittsburgh with the
PENNSYLVANIA CENTRAL RAILROAD,
OVER THE

Shortest, Quickest and most desirable route
to all Eastern Cities

VIA ALLENTOWN.—Passengers by this line reach New York in advance of any Northern Route.
2:45 P. M. Train is the only one from Columbus at this hour by which Passengers can reach Baltimore or Washington the following day, and arrive in Philadelphia or New York before dark.

Sleeping Cars on all Night Trains.

The only route from Columbus to Baltimore, Philadelphia New York

WITH ONLY ONE CHANGE OF CARS.

This Train also connects at Bellaire with the Baltimore and Ohio Railroad.

This Route is THIRTY MILES SHORTER to Pittsburgh, and more than 100 MILES SHORTER to New York than Northern Lines.

Baggage Checked Through to all Important Points East.

ASK FOR TICKETS VIA. BELLAIRE OR STUEBENVILLE.

Tickets good over either Route.

JOHN W. BROWN,

General Ticket Agent Central Ohio R. R.

IRA H. HUTCHINSON,

General Ticket Agent Steubenville Short Line.
Columbus, Dec. 25, 1861.

N. W. BALDWIN,

MATHEW BAIRD.

M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

419 y

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.
SUBSCRIPTIONS—\$3 Per Annum, in Advance.

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On square, single insertion, ...	\$1 00
" " per month, ...	3 00
" " six months, ...	12 00
" " per annum, ...	20 00
" column, single insertion, ...	5 00
" " per month, ...	10 00
" " six months, ...	40 00
" " per annum, ...	80 00
" page, single insertion, ...	15 00
" " per month, ...	25 00
" " six months, ...	110 00
" " per annum, ...	200 00

Card not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
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To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the Record

Railroad officers will place us under obligations if they will forward promptly to this office the Annual Reports, Monthly Statements, and such other matters as they may deem worthy of publication.

Subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

Arrival and Departure of Trains.

	Depart.	Arrive.
Cincinnati, Hamilton & Dayton—		
sport & Cbridge Express...	7.30 A. M.	9.15 P. M.
1st R. I. C. T. & Sand. Mail	7.30 A. M.	5.45 P. M.
Dayton & Toledo	7.30 A. M.	9.15 P. M.
2nd. Ham. Accommodation	9.00 A. M.	8.10 A. M.
3rd. Richmond, Day. & Bell'n Ex.	3.30 P. M.	9.15 P. M.
4th Dayton, Tol. & Detroit Ex.	5.30 P. M.	11.25 P. M.
Logansport and Chicago Express	7.30 P. M.	8.10 P. M.
Glendale Accommodation	7.30 P. M.	7.00 A. M.
6th. Columbus Express	10.00 P. M.	7.40 A. M.
Little Miami—		
Morrow Accommodation	7.40 A. M.	1.30 P. M.
2d. Day Express	9.45 A. M.	6.50 P. M.
Camp Dennison Accommodation	3.15 A. M.	6.10 P. M.
3d. Columbus Accommodation	4.00 P. M.	10.30 A. M.
4th. Xenia Accommodation	5.30 P. M.	8.00 A. M.
Marietta & Cincinnati—		
1st. Mail Express	8.10 A. M.	10.05 A. M.
2d. Accommodation	3.30 P. M.	5.45 P. M.
Cincinnati, Wilmington and Zanesville—		
1st. Mail Express	9.45 A. M.	8.00 A. M.
2d. Accommodation	5.50 P. M.	6.45 P. M.
Ohio & Mississippi—		
1st. Mail Train	7.00 A. M.	10.05 P. M.
2d. Aurora Accom.	3.5 P. M.	7.55 A. M.
3d. Express Train	7.20 P. M.	8.28 A. M.
Indianapolis & Cincinnati—		
1st. Mail	5.50 A. M.	9.45 A. M.
2d. Accommodation	2.45 P. M.	5.00 P. M.
3rd. Chicago Express	5.00 P. M.	12.20 A. M.
Kentucky Central—		
1st. Express	6.38 A. M.	10.44 A. M.
2d. Accommodation	2.24 P. M.	7.10 P. M.
Cincinnati & Chicago Air Line—		
1st. Mail	7.30 A. M.	9.15 A. M.

Change of Time for Opening and Closing
the Post-office.

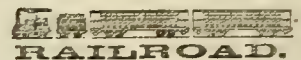
POST-OFFICE, CINCINNATI, NOV. 2, 1861.
IN CONSEQUENCE OF A CHANGE
of Running Time on the Railroads throughout the country, the hours for opening and closing the Post-office, on and after MONDAY (4th) next, will be 8 o'clock A. M. and 6 o'clock P. M.

The Great Eastern Through Mail, by the L Railroad, will leave at 10 o'clock A. M. The press will leave the Depot over the Cincinnati & Dayton R. R.

A schedule of the time for opening and closing the different Mails will be published as soon as practicable.

J. C. BAUM, POST MASTER

CHICAGO, GREAT WESTERN AND
NORTH-WESTERN LINE—INDIANA-
POLIS AND CINCINNATI SHORT-LINE



SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati daily for the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T., 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M. Chicago at 6:00 A. M., connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Are the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent,

C. R. COTTON, Cincinnati Agent.

OHIO & MISSISSIPPI
RAILROAD.
CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENT,
NES, Cairo, and St. Louis.

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.

RETURNING.—Mail Train Leaves East St. Louis, (Sundays excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M. arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office No. 5 East Third street; No. 1 Burnet House, corner office; north-west corner of Front and Broadway; Spencer House office; and at the Depot corner of Front and Mill Streets.

G. B. MCLELLAN, Gen'l Superintendent
November 11th, 1861.

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1861. 1861
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 AND
COLUMBUS AND XENIA
 AND
CINCINNATI, HAMILTON & DAYTON
RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Richmond, Indianapolis and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express—From Cincinnati, Hamilton and Dayton Depot—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

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All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

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FOR 1861

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, MARCH 6, 1862.

THE RAILROAD RECORD,
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If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

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To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

If Railroad officers will place us under obligations if they will forward promptly to this office the Annual Reports, Monthly Statements, and such other matters as they may deem worthy of publication.

Subscribers in Great Britain, 13s. 6d. (\$3 payable in advance).

Arrival and Departure of Trains.

	Depart.	Arrive.
Cincinnati, Hamilton & Dayton—		
Logansport & Chicago Express.....	7 30 A. M.	9 15 P. M.
1st R. E. C. T. & Sand. Mail.....	7 30 A. M.	5 45 P. M.
Dayton & Toledo.....	7 30 A. M.	9 15 P. M.
2nd. Ham. Accommodation.....	9 00 A. M.	8 10 A. M.
3rd. Richmond, Day. & Bell'n Ex.....	3 30 P. M.	9 15 P. M.
4th Dayton, Pol. & Detroit Ex.....	5 30 P. M.	11 25 A. M.
Logansport and Chicago Express.....	7 30 P. M.	8 10 P. M.
Glendale Accommodation.....	7 30 P. M.	7 00 A. M.
6th Columbus Express.....	10 00 P. M.	7 40 A. M.
Little Miami—		
Morrow Accommodation.....	7 40 A. M.	1 30 P. M.
2d. Day Express.....	9 45 A. M.	6 50 P. M.
Camp Dennison Accommodation.....	3 15 A. M.	6 10 P. M.
3d. Columbus Accommodation.....	4 00 P. M.	10 31 A. M.
4th. Xenia Accommodation.....	5 50 P. M.	8 00 A. M.
Marietta & Cincinnati—		
1st. Mail Express.....	8 10 A. M.	10 05 A. M.
2d. Accommodation.....	3 30 P. M.	5 45 P. M.
Cincinnati, Wilmington and Zanesville—		
1st. Mail Express.....	9 45 A. M.	8 00 A. M.
2d. Accommodation.....	5 50 P. M.	6 45 P. M.
Ohio & Mississippi—		
1st. Mail Train.....	7 00 A. M.	10 05 P. M.
2d. Aurora Accom.....	3 5 P. M.	7 55 A. M.
3d. Express Train.....	7 20 P. M.	8 28 A. M.
Indianapolis & Cincinnati—		
1st. Mail.....	5 50 A. M.	9 45 A. M.
2d. Accommodation.....	2 45 P. M.	5 10 P. M.
3rd. Chicago Express.....	5 00 P. M.	12 20 A. M.
Kentucky Central—		
1st. Express.....	6 38 A. M.	10 44 A. M.
2d. Accommodation.....	9 24 P. M.	7 10 P. M.
Cincinnati & Chicago Air Line—		
1st. Mail.....	7 30 A. M.	9 15 A. M.

[Third Article.]

RAILROADS OF THE WORLD.

CONTINENTAL RAILWAYS.

SPAIN.—The Madrid and Alicante line, 282 miles long, increased by the Toledo and Ciudad Real branches to 370 miles, has been open for a considerable length of time. The line from Madrid to Jadraque is 65 miles long; that from Barcelona via Saragossa to Pamplona is 337 miles long, and 99½ miles of other line also extend from Barcelona. A railway of 80½ miles is open between Cordova and Seville, a line extending 94½ miles from the latter point to Cadiz. A line 73 miles long reaches from Valencia to Almansa, 60 miles north of Alicante, on the railway connecting that port with Madrid. In the north, about 255 miles of railway are open from Santander and Barcena inland, and extend (with the exception of an interruption at the Sierra de Guadarama or Cantabrian Mountains,) southward via Valladolid with a branch to Burgos.

We have thus enumerated 1,375 miles of Spanish railways, but it is believed that about 1,450 are now open in Spain, while upwards of one thousand miles more are in course of construction, the contemplated "system" covering the whole kingdom from Bayonne to Cadiz, and from Corunna to Alicante, and thence along the Mediterranean to the French frontier. The actual cost of Spanish railways already executed may be set down at £26,000,000.

ITALY.—We have already, improperly perhaps, included the Lombard lines with the great Austrian system to which it belongs. Thus, besides the line entering Milan from Venice, the South Austrian Company work the line from Piacenza to Bologna, and from Plaisance to Bologna, the Piacenza line being 105, and the Plaisance line 91 miles long. Of the whole "system" of 1,294 miles, upwards of 300 are in that part of Italy now subject to the rule of Victor Emmanuel. Including this portion, the whole mileage of railways in the kingdom of Italy was, a few months ago, 1,115. Of this, 524 miles were at work, besides 66 miles about to be opened within the Sardinian territory, 212 in the Emilia, 222½ in Tuscany, besides 121 miles in construction, and 125 miles nearly completed in the Neapolitan territory. The Bologna and Ancona, 126 miles long, has since been opened, and, altogether, the present length may be taken at 1,350 miles. In our concluding summary we shall deduct from the mileage already given for Austria the 200 miles of Italian line worked in connection with the South Austrian system, and shall thus give full credit to Italy in respect of railway enterprise.

THE ROMAN STATES.—The line towards Naples is reported to have so far progressed that it was expected to run locomotives to Caprano by the present New Year. The line to Fras-

cati already open is 11½ miles long, besides a short branch.

RUSSIA.—The St. Petersburg and Moscow line, 400 miles long, is owned by the Russian Government, and its cost has, never, we believe, been stated officially. Bayard Taylor, an intelligent traveler, who spent some time in Russia, and paid much attention to this railway, states that its cost was £18,000,000, or £45,000 per mile.

The Grand Russian Railway Company had 501 miles of line at work at the date of their last report, and expected to open 568 miles more early in the ensuing season. As the company has been authorized to abandon its Southern line to the Crimea, the complete *reseau* will include 1,069 miles only, instead of nearly 2,600, as originally intended. The company's capital has been fixed at £20,000,000, most of which probably has been expended.

The St. Petersburg and Peterhof line, owned by Baron Stieglitz, is 18½ miles long, and is about to be extended to Narva.

The Riga and Dunaburg line, owned by an English Company, is 135 miles long, and we may estimate its cost at £1,500,000.

The Warsaw South Western line, extending to the Austrian frontier, and including branches, is 235 miles long. Taking its cost at £3,500,000, we shall have 1,289½ miles, and £43,185,000 capital expenditure, represented in part by extensive works in progress.

DENMARK.—The following enumeration includes the railways in Schleswig and Holstein.

Altona and Kiel, 65 miles; and branches to Itzehoe and Rendsburg, 42 miles. Flensburg to Tønning, with branch to Rendsburg, 70 miles; and Copenhagen to Corsoer, 56 miles. The Lubeck branch of the Berlin and Hamburg line, 29 miles long, is in Holstein.

We thus have 262 miles of railway in Denmark, the cost of which may be taken at £3,000,000.

NORWAY.—The Norwegian Trunk Railway, from Christiania to Eidsvold, is 42 miles long. The Stor Hammer line, of 21 miles, has been opened from the Trunk line to Elverum, and the Kongsvinger line, which is above 60 miles long, is expected to be opened in the spring.

SWEDEN.—From Gottenburg, the Government railway is open for 113 miles to Torebo, in the direction of Stockholm. About 50 miles of railway are open also from Malmo, nearly opposite Copenhagen. Of the Royal Swedish Railway extending towards Lake Wener, 45 miles are open. A line of 80 miles is completed also from Gefleland to Falun. There are thus 288 miles of railway open in Sweden, which have probably cost about £5,000,000, the Government having contracted a debt of £2,200,000 for railway purposes.

BELGIUM.—The railway system of Belgium is the most complicated, for its extent, of any

on the globe. Its extent is now 955 miles, divided in at least 24 miles, most of which are worked by the State. The mileage given includes the Sambre and Meuse line, and that portion of the Great Luxemburg within Belgium, the remainder properly belonging to Holland. The capital expenditure on the Belgian lines has probably reached £18,000,000.

HOLLAND.—The Dutch lines may be set down at 308 miles, including 37 miles of the Great Luxemburg, and portions of other lines which, although not absolutely in Holland, are part of its own railways, and are not included with those of other countries. The Dutch lines have probably cost about £6 000,000 all told. The Government of the Netherlands have resolved to carry out an extensive system of railways, embracing, in addition to those already noted, 668 miles of "first class," and 171 miles of "second class" railway. These lines will involve the construction of extensive bridges, some of which will require to have spans of unusual width.

SWITZERLAND.—The Swiss lines are already upwards of 600 miles in extent, and a large sum has been voted to their extension, *via* the Splügen pass, into Italy.

PORTUGAL.—The two lines, one from Porto d'Asseca, and the other from Barreiro to Vendas Novas, and measuring together rather more than 80 miles, are all that are yet in operation. During the past year, however, upwards of 22,000 men have been employed on the new lines.

TURKEY.—In European Turkey the Kustendje and Black Sea line, 40 miles long, and costing £300,000, is open. In Asiatic Turkey, 40 miles of the Smyrna and Aidin line are at work. The whole length of this line will be 80 miles, and its cost is estimated at £1,200,000.

ALGERIA.—The Algiers and Bildah line has been commenced, and also the Constantine and Philippeville line.

EGYPT.—The Alexandria, Cairo and Suez line, 204 miles long, has cost, probably, about £4,000,000.

NORTH AMERICA.

Returning now to America, the length and cost of British American railways being already given, we come to the United and Confederate States. These countries have, together, by far the most extensive railway system in the world. The railway companies do not report to the National Government, and only in a few States is any report made to the local Governments. The length and cost, however, of all the lines in the States have been carefully collected, for many years, by trustworthy statisticians, among whom the most authoritative is Mr. Henry V. Poor, of New York, for many years editor of the *American Railroad Journal*. These statistics gave the following results on the 1st of January, 1861, or one year ago:

United States:	Miles of Railroad open.	Cost.
Six New England States, including 149 miles leased to Grand Trunk, of Canada.....	3,715½	£30,349,842
New York, New Jersey, Pennsylvania, Delaware, Maryland and District of Columbia.....	6,922	72,332,200
Ohio, Michigan, Indiana, Illinois, Wisconsin and Iowa.....	10,333	79,579,612
California.....	70	740,741
Missouri and Kentucky.....	1,344	10,689,437
Total in loyal States.....	22,384½	193,591,632
CONFEDERATE STATES.		
Railways in the eleven seceded States.....	8,784	48,793,300
Total, United States.....	31,168½	£242,384,932

The railways in the "loyal" States have cost on the average £8,648 10s. per mile. Those in the Confederate States have averaged £5,555 per mile. The average cost of all the lines in the United and Confederate States has been £7,777 per mile.

Of the whole cost of £242,384,932, it is estimated, by the best authorities, that £60,000,000 are held in debentures and shares (chiefly the former), in Great Britain, and probably £40,000,000 on the Continent. The gross earnings of all the 31,169 miles was estimated for 1860 at £28,806,584, or 12 per cent. on the whole cost, the net earnings being similarly estimated at £12,345,678, or 5 per cent. As, however, more than one-half of the whole cost of American railways is represented by debentures, bearing from six to ten per cent. interest, the actual average dividends on shares could hardly have averaged as much as three per cent., and the whole share capital of American railways did not, previous to the breaking out of the present war, average much more than 50 per cent. of its par value in the share market.

On the 1st of January, 1861, there were, in the thirty-four States, and in addition to the 31,169 miles of railways then open, 17,080 miles, on which more or less work had been done, making the total of lines constructed, and in course of construction, 48,101 miles. Thus, in the State of Texas, which had but 294½ miles of railway open, there were 2,572½ miles in progress. Minnesota, which had no railways open, had 1,167 miles in progress.

The progressive increase of railways in the States is shown in the following statement of the miles open and in use at the end of quinquennial periods

	1831	1836	1841	1846	1851	1856	1861
	54 miles.	1,102 "	3,319 "	4,870 "	8,856 "	21,440 "	31,169 "

This increase is strikingly illustrated in certain of the principle States, North and South, as follows:

	Miles in 1861.	Miles in 1851.	Increase.
Ohio.....	3,057	497	2,560
Pennsylvania.....	2,943	142	2,777
Illinois.....	2,934½	1,304	1,505
New York.....	2,809	215	1,843
Indiana.....	1,805	413	1,392
Georgia.....	1,402½	665	737
Massachusetts.....	1,314	1,350	164

In Mexico a short line is open from the city of Mexico towards Vera Cruz.

WEST INDIES.—In Cuba upwards of 500 miles of railway are open and in use, the average cost of which may be taken at £10,000 per mile, equal to, in all, £5,500,000.

SOUTH AMERICA.

NEW GRANADA.—The Panama Railway across the Isthmus of Panama (Darien) is 49½ miles long, and cost £1,600,000, or say £32,000 per mile. The net receipts have averaged about £400,000, or twenty-five per cent. on the cost.

VENEZUELA.—Two or three lines have been commenced—one from Puerto Coabella to San Felipe, a distance of 53 miles, and another running from La Guayra towards Caracas.

BRAZIL.—In Brazil 27 miles of the Bahia line are open, and up to the 30th of June last £1,236,405 had been expended on the whole line, open and in progress.

There are also open 36½ miles of the Pernambuco line, the cost of which, thus far, has been £1,409,000.

The Don Pedro II. Railway is open for 38 miles from Rio de Janeiro to Belem, and 220 miles are in course of construction.

On 88 miles of the San Paulo line £314,000 had been expended up to the date of the last report.

CHILE.—In Chili the Copiapo Railway extends from the Pacific coast to Caldera, 74 miles inland, *via* Copiapo to Pabellon, whence the Copiapo Extension Railway, 26 miles long, extends to Chanaxillo, 100 miles from the sea. A branch of 53½ miles is in course of construction by the Copiapo Extension Railway Company.

From Valparaiso a line of railway has been opened for nearly one half the distance of 110 miles to Santiago, the Capital of the Republic. Another line is in progress from Santiago southward to Talca, a distance of 162 miles, upwards of 60 miles being open.

PERU.—Three lines are open in Peru—the Arica and Tacna, 38½ miles long, and one of 8½ miles from Callao to Lima, and one from Chorrillas to Lima. These three lines, nearly 50 miles in extent, may be set down at, in all, £500,000.

RECAPITULATION.

	Miles open.	Cost.
Great Britain and Ireland:		
England and Wales.....	7,583	34,396,445
Scotland.....	1,486	1,050,000
Ireland.....	1,364	1,000,000
	10,433	£36,446,445
India.....	1,408	20,648,049
Canada.....	1,826	1,050,000
New Brunswick.....	175	1,000,000
Nova Scotia.....	99	9,878,233
Victoria.....	183	1,750,000
New South Wales.....	125	508,000
Cape of Good Hope.....	28	
Total, Great Britain and Colonies....	14,277	£417,353,054
Continental Railways.		
France.....	6,547	184,440,000
Prussia.....	3,162	44,080,000
Austria, deducting 300 miles in Lombardy and Central Italy, but worked as part of the South Austrian system.....	3,165	45,243,400
Other German States.....	3,239	58,702,000
Spain.....	1,450	26,000,000
Italy.....	1,350	25,000,000
Rome.....	50	1,000,000

Russia.....	1,294	43,185,000
Denmark.....	262	3,000,000
Norway.....	63	700,000
Sweden.....	288	5,000,000
Belgium.....	955	18,000,000
Holland.....	308	6,000,000
Switzerland.....	600	10,000,000
Portugal.....	80	1,600,000
Turkey.....	80	1,000,000
Egypt.....	204	4,000,000
Total.....	22,692	£476,530,460

North and South America,

Exclusive of British America, the railways of which are included with Great Britain and Colonies.

United States.....	31,168	242,384,932
Mexico.....	30	200,000
Cuba.....	500	5,500,000
New Granada.....	49	1,600,000
Brazil.....	111	5,000,000
Paraguay.....	8	80,000
Chili.....	193	2,000,000
Peru.....	50	500,000
	32,102	257,264,932

Grand total of all the railways in the world..... 69,072 1,151,168,446

Inasmuch as the particulars given for the various countries are in some cases derived from returns a year, and in a very few cases two years old, it is probable that the actual extent of railway now open in the whole world is about 70,000 miles; and that the capital expenditure to date has been nearly £1,170,000,000.

TENNESSEE RAILROADS OPEN AND THEIR INFLUENCE.

One of the immediate effects of the fall of Fort Donelson will be the opening and commercial influence of the Tennessee railroads. In modern commerce and civilization, a railroad is more than equivalent to an army, and to command the railroads of a country is equivalent to commanding the country itself. While the Rebels held the whole railroad system of the South, they could command that whole section, its commerce and resources. Hence, one of the greatest, if not the very greatest, consequences of the capture of Bowling Green, Nashville, Clarksville, and the valleys of the Cumberland and Tennessee, is the opening of the Tennessee railroads to commerce. The roads which now are or certainly will be immediately opened are:

1. Louisville to Nashville..... 185 miles.
2. Bowling Green to Tennessee River... 106 "
3. Nashville to Columbia..... 42 "
4. Nashville to Murfreesborough..... 32 "

Aggregate..... 365 "

Of these 365 miles of road, only 65 miles to Bacon Creek were in operation (by Union men,) previous to the capture of Nashville; so that there are now three hundred miles of railroad actually open to the trade of Cincinnati and Louisville which were not open two weeks since. We understand that trains run on the Louisville and Nashville Road on Wednesday the 5th inst. The road to Tennessee is on the Memphis line. We may and do confidently assume, that the whole line to Memphis will be run from Louisville in a few weeks. So also, the line to Columbia is on the Decatur line, where there is now no opposition, and we may assume that also as soon

to be opened. The line through Murfreesborough is the one to Chattanooga, and that also will soon be open as far as Stevenson, near the southern line of Tennessee. Thus a breadth of country extending from Bowling Green to the south bend of the Tennessee River, intersected by railroads, will be relieved from the imprisonment in which it has been placed, and renew its commercial intercourse with the towns of the Ohio. The whole region, of which Nashville is the center, and which extends to the borders of Mississippi and Alabama, will soon need and must have a supply of products suitable to its wants. This region contains 40,000 square miles, and is one of the richest and most productive in the Southern States. Notwithstanding all the solemn assurances to the contrary, we believe that the necessities of that country, and the demands of trade, will bring the greater part of the cotton in Tennessee and a portion of Alabama to market. If so, 150,000 bales must find their way, by the railroads of Tennessee and Kentucky, to the Ohio River, and thence to the Atlantic. When Memphis falls (as we assume will be the case,) there can be no inducement for the planters of Tennessee to hold back their crop. The rebellion, as to them at least, will be ended. It will be nothing less than suicide for them to destroy their crops or withhold them from market. In return the manufactures of Cincinnati and other towns will be required in Tennessee and Alabama for the ordinary purposes of life. We think, therefore, it can not be long before the Southern trade will begin to move over the western railroads. At any rate, the six hundred miles of roads in Tennessee, which must soon be open, will speedily resume their proper and legitimate duties of moving the products of the South and West over their respective lines, and thus renewing the long interrupted commerce between the South and West.

WESTERN R.R. CO., MASS.

The annual meeting of the stockholders of this Company was held in Boston, Feb. 5th. The business year ends November 30. The following is the summary for the year 1861:

EARNINGS FOR 1861.	
Total income.....	\$1,894,567 96
General expenses.....	1,081,571 17
Net balance.....	\$812,996 79

The general expenses include \$92,127 75 paid on account of loss by fire at Albany on the 5th of July; \$50,000 has been paid into the sinking fund, which now amounts to \$2,500,292 49. Of this sum, \$459,578 62 was derived from construction funds and from the proceeds of shares, leaving as actual profits \$2,040,713 87, equal to \$39 62 to each share of stock: add to this the undivided surplus earnings or contingent fund, and the proportion of profits now undivided to each share of stock on the 30th of November last was about \$47 48.

The business of the Pittsfield and North Adams road, leased by the Western road, was as follows:

Receipts.....	\$36,538 37
Expenses.....	17 478 18
Balance.....	\$19,060 19

To this has been added \$7,939 81 by the Western Railroad, from which two dividends of 3 per cent. have been paid, amounting to \$27,000.

There are few roads in the country that can make as good an exhibit as the above. It must be at once gratifying and satisfactory to stockholders.

The opening of the Tennessee river by the Union forces will have an important influence upon the Cotton market. It is possible to draw supplies of cotton and tobacco from at least one half of the South by way of Tennessee. A million of bales of cotton could easily be gathered by inland commerce from the South, and the amount furnished to our factories would again set them going, with a portion to spare for the English market. With a blockade on the coast and an active internal commerce, the North will be benefited in every way; first, by the carriage of cotton, tobacco, hemp, and other Southern products throughout the country and the transportation to Europe; and second, by the sale of goods to such of the Southern States as are reopened, which are now in great need of them.

BELLEFONTAINE AND INDIANAPOLIS R. R.—At the stockholder's meeting of this road, held at Marion, Ohio, on Wednesday, the 20th inst., the following gentlemen were elected directors for the ensuing year:

John Brough, Henry Wick, W. A. Otis, Selah Chaimberlain, Stillman Witt, Cleveland, Ohio; James H. Godman, Marion, O.; John Mills, Sidney, O.

The following was stated to be the total earnings of the past year, viz:

Passengers.....	\$ 98,255
Freight.....	278,088
Mail.....	17,850
Expresses.....	10,347
Total.....	\$404,532
Working expenses.....	\$235,609
Interest and taxes.....	92,186
	327,795
Balance.....	\$76,737

PITTSBURGH, FT. WAYNE & CHICAGO R.R.

The following is a brief summary of the condition of this Company at the close of its late fiscal year:

Length of Main Line.....	467 miles.
" Branches.....	13 miles.
" Double Track.....	\$ 200,000
Capital Stock.....	\$ 250,000
1st Mortgage.....	5,100,000
2d ".....	2,000,000
3d ".....	
Domestic Bonds.....	
Income Bonds.....	
Total amount of Mortgage debt.....	12,350,000
Floating debt.....	
Earnings for the year.....	3,000,000
Operating Expenses.....	1,800,000
No. of Locomotives.....	95
No. of Baggage Cars.....	
No. of Freight Cars.....	1,200

TICKET AGENTS' CONVENTION.

The next regular meeting of the General Ticket Agents' Association will be held at the St. Nicholas Hotel, New York, on Wednesday, March 19th, 1862, as per resolution of last Convention. The Association will be called to order at 11 o'clock, A. M.

PORTLAND, SACO & PORTSMOUTH RAILROAD.

We are indebted to the officers of this company for a copy of their twenty-first annual report. It is made up for the year ending May 31, 1861, and was laid before the stockholders at their meeting in June. As we have not yet laid it before our readers, we publish the material portions of the report. The receipts and expenditures for the year were as follows:

RECEIPTS.	
Passengers—239,636.....	\$164,844 53
Freight.....	66,389 32
Expresses.....	3,355 96
Mails.....	7,837 44
Sundries.....	2,511 74
	\$245,348 99
EXPENDITURES.	
Machine shop.....	\$ 700 66
Maintenance of way.....	33,558 25
Locomotive power.....	28,293 11
Trains.....	12,572 00
Office establishment.....	12,435 33
Station expenses.....	21,435 15
	\$119,616 50
Credited renewal fund.....	10,000 00
	129,616 50
Net earnings.....	\$115,732 49
Dividend paid in Dec., 1860.....	\$45,000 00
" payable in June, 1861.....	45,000 00
	90 000 00
Surplus earnings this year.....	\$25,732 49
Surplus earnings per last report.....	\$1,990 88
And for under estimate May, 1860.....	1,606 48
	\$103,339 85
Deduct paid Boston & Maine R. R.....	\$19,000 00
" Eastern R. R. Co.....	19,000 00
Judgment in Folsom case.....	4,748 00
" Perkins case.....	1,458 97
	44,206 97
	\$59,132 88
Of the above surplus of \$55,122 88, there is in-	
vested in materials for use of the Road,	
about.....	\$33,000 00
Improvements.....	15,500 00
On wharf at Portland.....	10,930 04
Total.....	\$59,430 04

The equipment of the road has been kept in the most efficient condition, by expensive repairs upon the engines and cars. The locomotive department has been increased by the addition of a large and powerful new engine, for first class passenger trains; and this department was never in better or more complete order than at present.

New iron chairs and sleepers have been laid wherever required, and the track has been kept in the best possible condition. Several culverts and cattle passes have been rebuilt in substantial masonry.

The renewal of fences has been continued, and we have about material enough on hand to complete the whole length of the line, which work is now in progress.

The bridges on railroad, farm, and highway crossings, have been kept in good and safe

condition; several of the latter having been rebuilt the past year. The bridge over the channel of Fore River, between Portland and Cape Elizabeth, has been completed in a thorough manner, and will not require further outlay for several years.

The City of Portland has authorized the filling solid with earth those portions of the bridge over the flats on both sides of the channel; and contracts have been made for a sea wall, and the filling in solid of the road bed.

At Nonsuch River, at Scarborough, substantial abutments and a new bridge have been built. The original bridge was of very inferior design and construction.

At Biddeford, a new turn-out track, of about five hundred feet in length, has been built the past year. The accommodation for passengers is very limited and inconvenient. It is proposed to remodel the present passenger building for their better accommodation.

A new building has been erected at Portland for the accommodation of passengers, offices, etc., etc. This building is one hundred feet long by forty wide. It is very convenient, answering all the purposes for which it was intended, and supplies a long needed requirement at this station. The other buildings at Portland are ample for present wants.

At Portland an additional side track has been laid on the wharf lot. The repairs upon the wharf have not been fully completed, in consequence of the severity of the weather during the winter months, at which time they should have been done. They must now be delayed until the steamboats connecting with our road can be hauled off. We have all the materials on hand to complete these repairs.

A renewal of the bridge at Saco River is required, which, if of wood, will cost about \$18,000. The expense is considerably increased by our being obliged to keep the bridge in a condition to run the trains while the new one is building. Various plans have been submitted, both for iron and for wood, which are now under consideration. From the great difference in cost between wood and iron, we are inclined to favor the wooden structure. Contracts will be immediately made for this bridge, which will be completed by the first of October.

It will be observed that our gross earnings are more this year than the last, and the net income less. This arises from the cost of the new depot at Portland, the extensive repairs on bridge and wharf at Portland, and the severity of the winter with its frequent blocking snows, causing a great amount of labor, and the running of extra engines for clearing the track and assisting the regular trains.

No injury or accident of any kind has occurred to any passenger during the year.

We would remark that the road and equipments were never in a better condition than at the present time, and no extraordinary ex-

penditure is anticipated for the coming year. The greatest outlay will be in the rebuilding of the bridge over Saco river.

The report is accompanied with a tabular statement of the operations of the Company in transportation since 1845. From this table it appears that the receipts have increased from \$131,404 12, in 1845, to their present amount, \$245,348 99. The largest receipts were in 1855 when they amounted to \$278,949 43. The operating expenses began with 93 per cent. of receipts in 1845, and have gradually decreased to sixty-nine per cent. in 1861.

The line is 52 miles in length, and is reported to have cost \$1,360,183 97, or a trifle over \$26,000 per mile. The capital stock of the company is \$1,500 000, and there are no funded or floating debts. This company is therefore happily relieved of the great annoyances of these banes of the railroad system. Its stockholders may, therefore, feel that what is earned by the road is all their own. The net earnings of the past year were equal to 7½ per cent. on the whole capital of the Company. The gross earnings of the year were a little less than \$5,000 per mile of road.

PHILADELPHIA & ERIE RAILROAD.

This company, formerly the Sunbury & Erie Railroad, held its annual meeting in Philadelphia, February 10th. The eleventh annual report presented to the stockholders is as follows:

In our last annual report it was stated that application had been made to the Legislature of Pennsylvania for the passage of an act authorizing the mortgage on our road for seven millions of dollars to be satisfied, and a new one for five millions of dollars to be executed; the bonds under which should have precedence over the debt due to the State.

In accordance with this application an act was passed by the Legislature, and approved by the Governor on the 8th day of March, 1861, entitled "An Act to change the name of the Sunbury & Erie Railroad Company, and to facilitate the completion of a road from Sunbury to Erie."

By this act the corporate name of the company was changed to "The Philadelphia & Erie Railroad Company," and the company was authorized to issue five thousand bonds of one thousand dollars, or of two hundred pounds sterling each, bearing an interest of six per cent. per annum, to be secured by a mortgage upon the whole line of road, which should be the first lien upon the property described therein, except as to that part of the road which extends from Sunbury to Williamsport, upon which a mortgage of one million of dollars was, and still is, in existence.

The company was also authorized to execute forty bonds for one thousand dollars, each payable in forty years from the date thereof, bearing interest at the rate of six per cent. per annum, from and after the first day of January, 1872, the same to be secured by a mortgage to the Commonwealth of all the property of the company, which mortgage shall be subject to both the two above mentioned mortgages for five millions of dollars

and for one million of dollars respectively; the said forty bonds to be delivered to the Commissioners of the sinking fund, to be held by them as collateral security for the payment of the five per cent. bonds for three millions five hundred thousand dollars, then in the sinking fund, the time for the payment of which was extended till the maturity of the bonds for four millions of dollars thus to be given as collateral security therefor.

On the surrender and cancellation of all the five per cent. bonds of the company, made by authority of the act for the sale of the State Canals, approved the 21st day of April, 1858, except those above mentioned belonging to the State for three millions five hundred thousand dollars, it was made the duty of the Trustees of the mortgage for seven millions of dollars forthwith to enter-satisfaction of the record thereof.

The mortgage for five millions of dollars, and the bonds to be secured thereby, were duly executed, bearing date the 30th day of March last, and the mortgage for four millions of dollars to the Commonwealth, with the accompanying bonds, were executed on the first day of April last.

The passage of the act above recited, it was believed by the company and the Legislature, would secure the speedy completion of the road, through a sale of the bonds for five millions of dollars, thus having precedence of the debt to the State; and, in any ordinary state of the money market, such bonds, so secured, would undoubtedly have commanded a ready sale at a fair price.

By the time, however, the preliminary arrangements required by the act were completed, and the seven millions mortgage was satisfied, the country had become involved in the fearful struggle for its very existence, occasioned by the great rebellion still raging in one-third of the States of the Union, and taxing to the utmost the resources of the loyal States for its suppression. Under the great depression produced by this condition of the country, it was found impossible to negotiate a sale of these bonds at any price that would provide for the liabilities of the company, and complete the unfinished portion of the road.

The only party disposed to entertain any feasible proposition that would accomplish these all-important objects was the Pennsylvania Railroad Company, a company having, to a large extent, common shareholders with our own, and a like interest with us in developing the resources and trade of our State and its principal city. The proposal of aid from that company was connected with a proposition for a practically permanent lease to them of our whole line of road. After a very protracted negotiation, the terms of such a lease, and an accompanying contract, were finally agreed upon, as ratified by you at a special meeting held for that purpose on the 13th of November last; but from delays incident to the adjustment of many practical details, the same were not executed until the 6th of January of the present year.

By the conditions of this lease the Pennsylvania Railroad Company have entered into possession of our entire road and its appurtenances, for a term of 999 years from the first day of the present year; and they are bound at all times during said term to work, use, maintain, and efficiently operate and keep the same in public use at their own cost and risk, with such locomotives and cars, to be furnished and owned by them, as shall be required by the business thereof, and to furnish all such facilities and perform all such acts and things as may be lawfully and properly required to facilitate the business of the road.

For these expenses, risks and services, the Pennsylvania Railroad Company are to retain seventy per centum of the gross receipts of the road from all sources; the other thirty per centum thereof to belong to the Philadelphia & Erie Railroad Company, to be appropriated to the payment of its necessary expenses, and of the interest and sinking fund to become due under the several mortgages, and any surplus to form a dividend fund for the benefit of the stockholders.

By the provisions of the accompanying contract the Pennsylvania Railroad Company have agreed to purchase three millions eight hundred thousand dollars of our six per cent. mortgage bonds, at the rate of 85 per cent. of their par value, the whole of the proceeds thereof to be paid on the drafts of our company, as the work proceeds, under contracts to be approved by both parties, for the construction and completion of the railroad from Sunbury to the harbor of Erie, with the necessary sidings, depots, station-houses, machine shops and other buildings and improvements, and for such extensions thereof as the business of the road may require.

The remaining twelve hundred thousand dollars of the said bonds the Pennsylvania Railroad Company have agreed, by endorsements on said bonds, to purchase at par, as the interest and principal shall become due; the said bonds to be applied by our company toward the payment of its outstanding debts.

These twelve hundred thousand dollars of bonds, with the other assets of the company, do not afford sufficient means entirely to discharge these debts: but a large proportion of the creditors of the company have already consented to meet its necessities by accepting seventy per centum of the amount of their respective claims in said guaranteed bonds at par, and the other thirty per centum thereof in the stock of the company. It is confidently expected that the remaining demands of the same class will be settled on the same terms, so as to enable the company to discharge all its present liabilities, except the mortgage debts, and thus free its affairs from the embarrassments under which they have so long labored, and secure the speedy completion of our too long delayed enterprise.

Independently of the accomplishment of these most desirable objects, worthy in themselves of a great sacrifice, it is believed by intelligent parties, familiar with railroad management, that seventy per centum of the gross receipts of the line is not an unreasonable proportion to be retained by the company which is to be at all the cost and risk of operating and maintaining the road and its appurtenances, and of providing and keeping up the rolling stock therefor.

The amount of interest to be paid annually by the company on its mortgage debt, after the completion of the road, will be \$370,000, until the year 1872, when interest will commence on the mortgage to the State for \$4,000,000.

The Board confidently believe that the gross earnings of our road, which is to connect Philadelphia with the most important harbor on Lake Erie, can not be less than \$1,250,000 per annum from the first year that it is put into efficient operation throughout its whole length, with a steady annual increase of such receipts. Thirty per cent. of that sum will pay the annual interest for which the company will then, and for ten years from this time, be liable. Whenever the gross receipts shall amount to \$3,000,000 per annum, the proportion thereof belonging to this company will be sufficient not only to pay the interest on

all the mortgages of the company, but also six per cent. on its capital stock.

In view of the large and increasing gross receipts of all the other through lines of East and West roads, and of the peculiar advantages which our line possesses for both through and local business, it can not be reasonably doubted that in the course of a very few years our road must yield to its stockholders a fair return upon their investment; a return which must increase from year to year for a long period, as the resources of the large region of our State, for which it will be the sole outlet, shall become more and more developed.

No extension of the two detached portions of the road have been made for the two past years, so that for the years 1860 and 1861 there have been the same number of miles in operation. The receipts of these two years, from the business of the road, and the expenses of operating the same, are shown by the following table:

	1860	Receipts.	Expenses.	Net inc'd
Eastern Division.....	\$166,864	\$115,397	\$71,467	
Western ".....	82,534	56,031	26,523	
Totals.....	\$269,418	\$171,424	\$97,990	
1861.				
Eastern Division.....	\$209,498	\$118,419	\$91,089	
Western ".....	149,932	74,327	60,605	
Totals.....	\$350,430	\$192,736	\$157,694	

This table exhibits an increase of net income for 1861, over the previous year, of more than 60 per cent., the larger portion of which is due to the Western Division. This has been in a great measure owing to the enormous increase of the oil production of Northwestern Pennsylvania, the first dawnings of which were pointed out in our last annual report. The business arising from this new source is at present confined to the Western Division of the road, but as soon as the connection between the Eastern and Western Divisions shall be effected, will pass over nearly the whole length of the line, and of course add greatly to its revenues.

The remarkable increase of this fresh article of production and commerce, and for which our road is to be the most important outlet, is shown by the number of barrels of oil transported over it for the last three years:

	Barrels.
In 1859, there were.....	323
In 1860, ".....	29,119
In 1861, ".....	134,527

The financial condition of the company on the 31st of December last, as shown by the Treasurer's account, was as follows, to-wit:

RECEIPTS AND LIABILITIES.	
Capital stock paid in.....	\$4,523,389 14
Seven per cent. bonds issued.....	404,508 21
Bills payable.....	747,467 31
Preferred debt (scrip) outstanding.....	511,300 00
Bonds issued to State, in paym't for Canals,	4,000,000 00
Due contractors and others.....	531,959 72
	\$10,978,016 18
To which add net income from road.....	446,988 51
	\$11,425,004 69

EXPENDITURES.	
Road construction and superstructure.....	\$7,226,989 93
Buildings, land and right of way.....	403,508 21
Engineering.....	316,623 87
Equipment.....	280,661 57
Piers at harbor of Erie.....	99,005 17
Discount on municipal and other bonds.....	884,962 58
Interest on commission, on loans.....	369,148 03
Interest to stockholders.....	413,939 17
Interest on bonds including interest to State,	
up to January 1st, 1872.....	630,785 84
Office expenses, salaries, printing and miscellaneous.....	258,540 42
	\$10,873,956 29

Assets.—Cash.....	\$1,020 86
Bills receivable.....	8,854 50
North Branch Canal bonds.....	323,009 00
Wyominz Canal bonds.....	84,000 00
Other bonds and stocks.....	67,000 00
Due by Companies.....	60,100 00
Interest due.....	31,286 41
In hands of Agents.....	51,826 52—
	551,048 40

\$11,425,004 69

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.	
Atlantic and Great Western.....	N.Y. & Pa.		48	\$	\$	\$	\$	\$								
Baltimore and Ohio.....	Md.		380	13,111,800	10,781,833	566,070	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5				
do do										"	2,500,000	6		1885		
do do										"	700,000	6		1880		
do do										"	1,125,500	6		1875		
do Washington Branch.....	Md.		50	1,650,000						"	1,000,000	6		1867		
Bellefontaine and Indiana.....	Ohio & Ind.		118	1,850,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	6		1866		
do do										2d	100,000	7		1870		
Buffalo and State Line.....	N.Y. & Pa.	121	68	1,950,950	1,049,000	27,543	911,010	498,047	June 30, 1860							
do do																
Burlington and Missouri.....	Mo.		75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000					
Camden and Amboy.....	N. J.		96	3,98,400	8,400,000		1,997,465	733,550	Dec. 31, 1860	1st Mortgage.....	3,700,000	6		1864		
Central Ohio.....	Ohio.		137	In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7		1861		
do do										1st	800,000	7		1864		
do do										2d	80,000	7		1863		
do do										3d	80,000	7		1865		
do do										4th	3,365,000	7		1876		
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7		1865 & 1870		
do do										2d	600,000	7		1875		
Chicago, Alton and St. Louis.....	Ills.		222	In hands of Receiver.	6,168,520	730,000	994,569	225,767	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7				
do do										2d	1,500,000	7				
do do										3d	1,000,000	10				
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000					
do do										2d	200,000					
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		104	2,897,750	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.....	1,250,000	7	41	Feb. & Aug. 1		
do do										2d	3,000,000	7	41	Feb. & Aug. 1		
do do										3d	2,000,000	6	11	May 1.		
Chicago and Rock Island.....	Ills.	53 1/2	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	8		1870		
Chicago, Burlington and Quincy.....	"	6 1/2	138	4,609,340	4,814,513		1,514,428	761,830		Cons. 1st Mort. S. F. 2d " S. F. 1st Mor. Chi. & Aur. 2d " " 1st " Cent. Mil. Tract 2d " "	2,172,000 215,000 303,000 203,000 39,000 215,000	8 6 7 7 8	94	1873 1890 1897 1869 1864 1868		
do do																
do do																
do do																
Chicago, Iowa and Nebraska.....	Ind.		82	No report												
Cincinnati and Chicago Air Line.....																
do do																
Cincinnati, Hamilton and Dayton.....	Ohio.		60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000			1867		
do do										2d	950,000			1860		
Cincinnati, Wilmington & Zanesville ..	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000					
do do										2d	334,000					
do do										3d	104,000					
do do										Income.....	305,500					
Cleveland and Mahoning	Ohio.		68 1/2	1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7				
do do										2d	4,400,000	7				
do do										3d	344,000	8				
Cleveland and Pittsburgh.....	Ohio & Pa.	6	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L. 2d " M. L. or 1st Ex. 3d 2d Ex. 4th 3d Ex.	800,000 1,185,000 1,165,000 1,154,000	7 7 7 7	13 1/2	1860 1873 1865		
do do										1st Mort. Jan. 1st Div. 1st " " 2d Div. 2d " " 1st " Tol. Nor. & Clev 2d " " Junction Income.. C. & T. Income..	339,000 263,000 263,000 521,000 293,300 44,300	7 7 7 7 7 7		1867 1872 1862 1863 1864 1862		
Cleveland and Toledo.....	Ohio.	45 1/2	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890		
do do										2d	564,000	7		1861		
do do										3d	303,000	7		1862		
Cleveland, Columbus and Cincinnati..	Ohio.	109	135	4,746,100	510,000	4,201	1,255,003	604,888	Dec. 31, 1861.	Dividend.....	272,700			1860 to 1866		
Cleveland, Painesville and Ashtabula..	"		98 1/2	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860.	1st Mortgage.....	519,000	7		1864 & 1890		
do do										2d	564,000	7		1861		
Columbus and Xenia.....	Ohio.		54 1/2	1,490,000	299,700	50,500	See L. Miami.			1st Mortgage.....	300,000	8		1860 to 1866		
Columbus, Piquette and Indiana.....	"		103	In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar. 31, 1860.	2d	2,212,000	8				
Dayton and Michigan.....	"		142	2,176,966						1st Mortgage.....	300,000	7		1862		
do do										2d	2,000,000	7		1863		
Dayton and Western.....	Ohio.		38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	2,000,000	7		1875		
Detroit and Milwaukee.....	Mich.		196	No report						2d	1,000,000	8		1866		
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.		111	No report												
Dubuque, Marion and Western.....	"		51	No report												
Eaton and Hamilton.....	Ohio.		36	469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734					
Evansville and Crawfordsville.....	Ind.		132	906,001	1,219,100	249,683	124,140			2d	400,000					
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	18,000					
Galena and Chicago Union.....	Ills.		70	121	6,028,300	3,524,200	none	1,469,752	652,200	Dec. 31, 1860.	1st Mortgage.....	1,900,000		100	1862 & 1863	
do do										2d	1,200,000			May 1, 1873		
Great Western	Ills.		175	1,600,000	2,391,000		45,943	181,529	May 31, 1861.	1st Mortgage W. D. 1st " E. D.	1,041,000 1,359,000	10 7	99	1862 & 1863		
Green Bay, Milwaukee and Chicago...	Wis.		54	400,000	No report					Land Mortgage... Mortgage Conv.....	5,000,000 1,354,000	6 30		1873		
Greenville and Miami.....	Ohio.		32	300,000	473,000	75,000	63,141	13,573	Aug. 31, 1861	1st Mortgage.....	927,000	6		1873		
Hannibal and St. Joseph.....	Mo.		208	1,041,986	10,554,000	220,306	996,907	512,933	Sept. 1, 1860.	1st Mortgage.....	4,000,000	7	102	1869 & 1870		
do do										2d	2,000,000	7		1870		
Hartford and New Haven.....	Conn.		62	2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	3d " "	1,840,000	8		1875		
Hudson River.....	N. Y.		37	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	Optional..... Construction.....	38,000 12,884,000 4,115,000	7 7 6		1868 1875		
do do										Debtentures.....	42,700			1875		
Illinois Central.....	Ills.		65	455	15,654,920	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	1st Mortgage.....	60,000				
do do										2d	578,000	10				
do do										Income.....	38,700	1				
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	500,000			1866		
do do										2d	400,000					
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,284	140,689	448,858	230,834		Real Estate Mort.....	200,000					
do do										1st Mortgage.....	640,900					
Indianapolis, Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860	2d	314,000					
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report									
Iron.....	Ohio.		13	118,865	50,000		No report									

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int. Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st	29,000	7	1861	
do										2d	392,000	7	1873	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	496,408	227,534		1st Mortgage.....	110,000	6		
do										1st	260,000	7		
do										2d " Conv.	1,000,000	7		
do										3d	600,000	7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	90,000			
do										2d " E. D.	1,000,000			
do										1st Land Grant W D	4,000,000	12		
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.	29		514,433	130,000		108,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6	1883	
Little Miami.....	Ohio.	65					1,530,050	529,981	Jan. 1, 1862	City Loan.....	174,000			
Louisville and Frankfort.....	Ky.	65		1,169,59	354,519		245,910	98,679	June 30, 1861	1st Mortgage.....	248,000	7		
do										1st Mortgage.....	2,000,000			
Louisville and Nashville.....	Ky.	268		5,631,409	3,260,500	348,076	807,934	461,970	July 1, 1861	1st " Lebanon Br.	400,000			
do										1st " Memphis Br.	500,000			
Louisville, New Albany and Chicago..	Ind.	258		2,800,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,503	99,000	Dec. 31, 1860.	1st Mortgage	600,000	7	1861	
Marietta and Cincinnati.....	Ohio.	203		8,561,213	190,408	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7	1868	
do										2d	2,000,000	7		
do										3d	1,500,000	7		
do										Sterling Income...	333,000	4		
Michigan Central.....	Mich.	54½	224	6,037,724	7,968,489	125,000	2,126,609	910,169	May 31, 1861	Domestic	928,617			
do										1st Mortgage Sterling	467,483	6	1872	
do										1st " Conv.	500,000	8	1869	
do										1st " unconv.	250,000	8	1860	
do										1st " Dollar Conv.	2,598,000	8	1869	
do										1st " S. F. Conv.	4,133,000	8	1862	
Michigan South'n & North'n Indiana	Mich &	23½	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. S.	991,000	8	1860	
do										" Nor. Ind.	985,000	8	1861	
do										" Goshen Line.	1,168,000	8	1868	
do										S. F. Toledo	2,850,000	8	1865	
do										2d Mortgage	2,465,000	8	1877	
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d	20,000	7		
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8		
do										2d	600,000	8		
Milwaukee and Prairie du Chien.....	Wis.	20½	192	4,944,000	2,556,000		683,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	1891	
Milwaukee and Western.....	Wis	71		No report										
Mississippi and Missouri.....	Iowa,	55		No report						1st Mortgage Conv.	1,000,000	7		
do										2d " S. F.	400,000	8		
do										Oskaloosa Div.	1,425,000	7		
New Jersey.....	N. J.	33	34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Land Grant.....	7,000,000	7		
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	Mortgage.....	711,000	7		
New York and Erie Pref.....	N. Y.	58½		Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860.	1st Mortgage.....	3,000,000	10½		
do		31½								2d	4,000,000			
do										3d	6,000,000	96		
do										4th	4,900,000	84		
do										5th	1,792,500	76		
New York and Harlem Pref.....	Conn.	30	138	5,717,190	6,055,752		1,142,251	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	1873	
do		12½								2d	1,000,000	7	1864	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7	Dec. 1, 1866	
do										"	978,000	6	Oct. 1, 1875	
New York Central.....	N. Y.	84½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,925,000	6	98	
do										Mortgage.....	3,000,000	7	104½	
Northern Central.....	Md.	138		2,260,000	5,890,300	557,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,066,500	6	June 15, 1884	
North Missouri.....	Mo.			2,403,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6	1885	
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6		
do										3d	316,995			
do										Construction.....	4,637,920			
do										Income.....	3,591,185			
Ohio and Mississippi, Western Div....	Ills.	148			3,292,403		No report			State Loan.....	7,000,000	6	38	
Pacific.....	Mo.			3,199,662	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	" S. W.	2,800,000	6		
do										Construction.....	4,500,000	6		
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	387,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,900,000	6	1888	
do										2d	2,319,000	6	1875	
do										2d " Sterling.	1,957,410	6	1873	
do										State Works.....	7,200,000	5		
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report			1st Mortgage.....	2,300,000	6	1894	
Philadelphia, Wil. and Baltimore.....	Del.	98		5,600,000	2,310,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6	1863	
do										1st Mort. O. & P.	1,000,000	7	1865	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,757,273	2,335,303	761,555	June 30, 1861	2d	750,000	7	1866	
do										1st " O. & I.	1,000,000	7	1872	
do										2d	360,000	7	1873	
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,557	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000			
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.					
Sandusky, Dayton and Cincinnati ..	Ohio.	170		2,607,000	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10	1858	
do										"	997,000	7	1866	
do										"	1,000,000	7	1875	
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	195,974	31,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7	1868	
Shelton and Hooking Valley.....	Ohio.	56		40,000	500,000	100,000	110,200	53,100						
Springfield, Mt. Vernon & Pittsburgh.	Ohio.	56		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000	7	1870	
do										2d	400,000	7	1865	
Staubenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7	1865	
do										2d	900,000	7	1862	
Terre Haute, Alton and St. Louis.....	Ills.	208		No report						1st Mortgage Conv.	1,000,000	7	1868 & 1870	
do										2d " Conv.	2,000,000	7	1873	
do										1st " Bel. & Ill.	517,000	7	1866	
Terre Haute and Richmond.....	Ind.	100	73	1,394,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	270,000	7	Aug. 1, 1865	
Toledo, Wabash and Western.....	Ohio & Ind	54	343	2,123,500	3,996,049	52,389	233,545			1st Mortgage.....	1,400,000	7	Nov. 1, 1878	
do										2d	2,500,000	7	1860 to 1865	
do										Mort. Coupons....	96,049	7		

Since the first of the present year the several items of the floating debt of the company have been much diminished by payments and settlements, and they stand at the present date as follows, to wit:

Bills payable.....	\$367,674 69
Scrap outstanding.....	356 100 00
Due contract rs, &c.....	250,114 00

A proposition has been recently made by Edward Miller & Co., and accepted by the Board, with the approval of the Pennsylvania Railroad Company, for the completion, on favorable terms, of the unfinished portion of the road, and the work will be prosecuted with the utmost vigor and dispatch.

The details of the working of the road for the past year are shown in the intelligent and lucid report of Edward F. Gay, Esq., the Vice-President and General Superintendent, as herewith submitted.

Submitted by order of the Board,

WM G MOORHEAD, *President*.

The report of Edward F. Gay, Esq., Vice-President and General Superintendent, was read. The subjoined extract exhibits the operations on the finished portions of the road, comprising *eighty miles* on the Eastern Division and *sixty six miles* on the Western Division, for the years 1861 and 1860:

Receipts.	1860.	1861.	Increase.
East-rn Division.....	\$186,864	\$209,498	\$22,634
Western ".....	82,554	140,932	58,377
Total.....	\$29,418	\$350,430	\$81,011
Expenses.	1860.	1861.	Increase.
Eastern Division.....	\$115,397	\$118,409	\$3,012
Western ".....	56,431	74,327	18,295
Total.....	\$171,438	\$192,736	\$21,397
Receipts over expenses in 1861.....			\$157,694
Increase of receipts in 1861 over 1860.....			30 per cent.
Increase of expenses in 1861 over 1860.....			12 1/2 "
Percentage of expenses to receipts, 1860.....			63 1/2 "
Percentage of expenses to receipts, 1861.....			55 "
Net earnings, 1860.....			36 1/2 "
Net earnings, 1861.....			45 "

On motion of John Turner, Esq., the reports were read and accepted, and referred to the incoming Board for publication.

The meeting took a recess to 2 o'clock P.M. to go into an election of Managers, John M. Riley, Esq., of Philadelphia, and Henry Souther, Esq., of Elk county, having been appointed tellers.

At two o'clock P.M. the tellers reported the election of the ten persons whose names are subjoined, as Managers for the ensuing year:

Managers.—Wm. G. Moorhead, Ellis Lewis, Henry Duhring, D. K. Jackman, C. B. Wright, James D. Wetham, F. M. Drexel, Joseph M. Sterrett, Thomas S. Fernon, Edward F. Gay.

The shares voted (\$100 par) numbered 15,102. The meeting then adjourned.

The Philadelphia City Directors, elected January 30, are—Wm. H. Witte, Harry Connelly, John T. Smith.

HANNIBAL & ST JOSEPH & PACIFIC RAILROADS OF MISSOURI.

The following joint resolution, passed in the House of Representatives, Feb. 13th, will sufficiently explain itself. It is a simple act of justice to the two Companies, and we are pleased to see that its passage was unequivocal:—

WHEREAS, By the fourth section of an act of Congress, entitled "An act granting the right of way to the State of Missouri, and a portion of the public lands to aid in the construction of certain railroads in said State," approved June 10, 1852, it is provided as follows: "That the said lands, hereby granted to the said State, shall be subject to the disposal of the Legislature thereof, for the purposes aforesaid and no other; and the said

railroads shall be and remain public highways for the use of the Government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States;" and

WHEREAS, The said grant of lands has, by virtue of said act, and of an act of the Legislature of the State of Missouri, been applied to the construction of the Hannibal and St. Joseph Railroad, constructed and owned by the Hannibal and St. Joseph Railroad Company, and the Pacific Railroad, by the Pacific Railroad Company, which last mentioned road is finished and running from St. Louis to Rolla; and

WHEREAS, The ability of the said railroad companies to transport the property and troops of the United States over their respective railroads has been greatly impaired by the destruction of bridges, depots and other property of said companies, and the partial destruction of said roads by the public enemies; and in consideration thereof, and in view of the pressing public necessities, the United States, not waiving the right to have their property and troops transported free from toll or other charge by said railroads, as contemplated by the reservation aforesaid, have resolved as follows: Therefore:

Be it resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War is hereby authorized to make such an adjustment with the Hannibal and St. Joseph Railroad Company and the Pacific Railroad Company for the transportation, past and prospective, of the property and troops of the United States over said railroads during the existence of this rebellion, as in view of the public exigency may be just and reasonable, and liquidate the same: *Provided, however,* That the sums paid to said companies shall be as near as may be the cost of transporting such property and troops, and not exceeding the prices fixed by the War Department on the 12th day of July, 1861, for transportation by railroads.

Which adjustment and liquidation shall preclude any further claim on behalf of such companies against the Government on account of claim for compensation for damages previously accrued: *And provided further,* That the Secretary of War, may, in his discretion, withhold from time to time such portion of the moneys which may be due to either of said railroad companies, to indemnify the Government against any failure of such company to promptly transport such troops and supplies; but nothing herein shall be so construed as to prevent the Secretary of War from taking possession of said railroads and their appurtenances, and applying the same to the exclusive use of the Government whenever, in his judgment, the public interest may require it, without, in such case, compensation to said companies.

LEHIGH VALLEY R. R. Co.—At the annual meeting of the stockholders of the Lehigh Valley Railroad Company, held at the office of the Company in Philadelphia, on Monday 13th Jan., the following named gentlemen were elected officers for the ensuing year:

President—Hon Asa Packer.

Managers—J. Gillingham Fell, Robert F. Stockton, John T. Johnson, W. H. Gatzner, Elisha A. Packer, John N. Hutchinson

Treasurer and Secretary—William H. Ely.

Hon. Asa Packer, the present President, known over the State as "Judge Packer," built the road, has contributed much to its success, and is now its deserving official head.

MICHIGAN SOUTHERN AND NORTHERN INDIANA R. R.

—This company closed its fiscal year on the 28th ult. The following is the comparative statement of its earnings:

Gross earnings during the fiscal year.....	\$2 150,000
Previous year.....	2,075,070
Increase on the year.....	\$75,000
The net earnings will probably reach.....	\$1,125,000
Deduct seven per cent. on \$9,714,704 of funded debt.....	700,000
Surplus on the year.....	\$425,000
The floating debt last year was.....	437,886

CHICAGO & NORTH-WESTERN R. R.

The following is the statement of the earnings of this road for January:

	1861.	1862.
Passengers.....	\$17,451 57	\$13,655 62
Freight.....	26,000 34	32,360 58
Express.....	807 03	731 25
Mail.....	1,695 83	1,416 66
Miscellaneous.....	50 00	100 68
Total.....	\$46,604 77	\$48,325 19
Decrease.....	1,740 42	

The following is the general statement of the Company for the ten months from April 1, 1861, to Feb. 1, 1862:

	1861-2.	1860-1.	Increase.
Passengers.....	\$260,973 69	\$208,396 78	\$52,576 91
Freight.....	450,197 17	360,264 28	79,932 89
Express.....	8,126 33	7,122 50	1,003 83
Mail.....	16,440 20	15,341 64	1,098 56
Miscellaneous.....	947 95	879 27	68 68
Mileage of cars.....	4,093 76	....	4,093 76
Total.....	\$741,385 10	\$612,134 47	\$129,250 63

UNFUNDED DEBT.

Balance due Winslow, Lanier & Co., June 1, 1862, secured by deed on Chicago Depot Grounds.....\$43,000 00
Amount of contracts and mortgages outstanding unpaid on Chicago Depot Grounds, being for part of the original purchase money.....8,093 05

Amount of contracts and notes outstanding unpaid, as follows:

C. P. Chandler, for one locomotive.....	\$5,045 50
Ludington, Cross & Scott, for two locomotives.....	2,000 00
Converse, Young & Hyde, for car wheels.....	8,868 88
The Rogers Locomotive Works, balance on four locomotives.....	10,132 77
Nashua Iron Co., for car axles.....	5,523 35
Hale & Ayer, for iron, etc.....	4,335 41
Briggs, Spafford & Penfield.....	2,400 00
Geo. H. Thatcher & Co., for car wheels	1,785 87
Lewis Page & Co., for oils, paints, etc.	1,730 49
Jessup, Kennedy & Adams, iron, etc.	703 24
G. Dunbar, steel, leather belting, etc.	619 33
H. W. Brown, iron castings.....	340 99
Sundry parties for materials.....	1,27 57
	44,834 00

The above fall due as follows:

Between Feb. 1, 1862, and Aug. 1, '62.....	41,228 50
Between Aug. 1, 1862, and July 1, '63.....	3,515 50
Total.....	\$44,834 00
Sundry unpaid audited accounts for materials purchased, etc.....	\$65,892 33
Pay Roll for January.....	19,493 77
	85,386 10

Amount of Advance Charge Checks outstanding.....	1,865 62
Amount due P. H. Smith for advances.....	670 06
Amt due W. B. Ogden, for advances.....	56,270 68
Balance of account due C. C. Campbell, contractor.....	5,020 85
Balance of acct. due Wells & French, contractors.....	612 96
Balance of account due Clark Lipe, contractor.....	1,524 43
Amount due Railroad Companies and Ticket Agents, for balance to Feb. 1, 1862.....	11,602 49
Balance due sundry persons.....	675 76
	264,515 9

INCOME ACCOUNT.

Balance to credit of Income Account, being excess of Earnings over Operating Expenses, and amount paid for Interest on Bonds, Exchange, etc., from June 1, 1859, to Feb. 1, 1862, as per statement attached.....\$536,190 82

MONETARY AND COMMERCIAL.

The money market has not been afflicted with any serious changes since our last issue. The good feeling so generally prevalent among all classes of society, consequent upon the recent victories of the Union arms, has had its influence upon bankers, as well as other interests in trade, and has strengthened confidence and hope. The avenues for the use of money are necessarily limited, and bankers are as cautious as ever as to what purpose the money they loan is to be applied, but where it is perfectly satisfactory no difficulty is experienced in obtaining all that is necessary at reasonable rates.

In the Exchange market dealers have not cared to operate to any very great extent. The peculiar position of some of the New York banks relative to Treasury Notes rendering it unsafe, and rates have necessarily varied from day to day. Present quotations are:

	Buying.	Selling.
New York, sight.....	$\frac{1}{2}$ dis.	$\frac{1}{2}$ prem.
Philadelphia, ".....	$\frac{1}{2}$ dis.	$\frac{1}{2}$ prem.
Boston, sight.....	$\frac{1}{2}$ dis.	$\frac{1}{2}$ prem.
Baltimore, sight.....	$\frac{1}{2}$ dis.	$\frac{1}{2}$ prem.
Gold.....	$\frac{1}{2}$ prem.	$\frac{1}{2}$ prem.

The following summary shows the aggregate of the resources and liabilities of the Banks of the State of New York, as exhibited by their reports to the Superintendent of the Banking Department of the State of New York, of their condition on the morning of Saturday, the 28th day of December, 1861:

RESOURCES.	
Loans and discounts.....	\$191,083,141
Overdrafts.....	\$1,394 and 368,366
Due from banks.....	18,793,709
Due from directors.....	\$7,305,285
Due from brokers.....	2,197,815
Real estate.....	9,319,788
Specie.....	29,103,715
Cash items.....	18,993,733
Stocks and promissory notes.....	56,770,019
Bonds and mortgages.....	6,976,825
Bills of solvent banks.....	2,119,520
Bills of suspended banks.....	\$63 and 2,215
Loss and expense account.....	1,810,617
Add for cents.....	930
Total.....	\$334,755,638
LIABILITIES.	
Capital.....	\$109,403,379
Circulation.....	39,553,020
Profits.....	14,152,157
Due banks.....	34,431,615
Due individuals and corporations other than banks and depositors.....	2,501,299
Due Treasurer of the State of New York.....	3,915,976
Due Depositors on demand.....	125,178,934
Amount due, not included under either of the above heads.....	14,618,777
Add for cents.....	501
Total.....	\$334,755,638

The Michigan Central Railroad Company earned in the third week in February:

Third week, 1862.....	\$38,776 10
Third week, 1861.....	26,454 10
Increase.....	\$12,322 00

The following is a statement of the earnings of the Great Western Railroad for the week ending Feb. 21, compared with the earnings of the corresponding week of last year:

Passengers.....	\$10,992 45
Freight and live stock.....	38,609 82
Mails and sundries.....	1,239 93
Total.....	\$50,977 20
Corresponding week of last year.....	46,034 20
Increase.....	\$10,944 00

The detailed earnings of the Cleveland and Toledo Railroad for the week ending Feb. 21, 1861 and 1862, are as follows:

	1861.	1862.
Local tickets.....	\$3,417	\$2,897
Foreign tickets.....	3,038	1,439
Conductor's reports.....	790	476
Extra baggage.....	72	410
Total passenger receipts.....	\$7,347	\$6,442
Local freight.....	\$7,149	\$5,217
Foreign freight.....	5,569	9,721
United States Mail.....	496	496
Total freight receipts.....	\$13,214	\$15,434
Total earnings.....	\$20,561	\$21,876
Increase.....		\$1,315

The Rock Island Road earned the third week in February:

1861.....	\$15,154 48
1862.....	20,642 00
Increase.....	\$5,487 52

The three weeks receipts are equal to the largest month in February, in the history of the road.

The Michigan Southern earned the third week in February an increase of \$8,500.

The Norwich and Worcester Road, we understand, shows an increase of \$15,000 in the past three months.

The following will show the earnings of the New York and Erie Railway Company for the last four months, compared with the three preceding year:

	1858-59.	1859-60.	1860-1.	1861-2.
October.....	\$456,246	\$465,958	\$587,242	\$722,362
November.....	438,898	536,608	561,448	734,336
December.....	392,232	414,764	412,732	708,136
January.....	404,767	361,453	407,910	695,616
Four months.....	\$1,590,153	1,798,783	1,969,361	2,860,940

The earnings of the Toledo and Wabash Railroad for the week ending Feb. 14 were:

	1861.	1862.
Passengers.....	\$3,388 20	\$2,743 58
Freight.....	8,747 13	9,239 85
Total.....	\$21,135 33	\$11,983 42
Decrease.....		151 91

The Galena and Chicago road earned the third week of February:

1862.....	\$21,569
1861.....	18,189
Increase.....	\$5,380

The Cleveland and Toledo Railroad earned the third week in—

February, 1861.....	\$20,561
February, 1862.....	21,876
Increase.....	\$1,315

The Housatonic Railroad earned for the—

Year 1861.....	\$225,291 00
Expenses.....	\$124,335 68
Taxes, rent, and interest.....	93,003 03
	217 336 71

Surplus to account of profit and loss.....\$7,955 26

The President says:

The war has operated with peculiar severity on the manufacturing interests of your road, reducing the receipts to the unprecedentedly low figure of \$225,292—a reduction of 29.40 per cent. from those of 1860.

It is scarcely possible but that the receipts for 1862 should considerably exceed those of 1861; but the unsettled condition of our national affairs does not allow us to make a trustworthy estimate. Unless, however, they

are increased by at least \$50,000 you need not expect any material increase in the expenses.

The February earnings of the Hudson River road are reported to show \$70,000 increase on the same month of last year.

The New York Central road, we also learn, will show about \$375,000 increase, and the Erie about the same increase as in January.

The Milwaukee Sentinel of February 26th says:

Exchange was flat yesterday, and scarcely salable at par, the banks confining purchases to the offerings of their customers. The "current rate" was nominally $\frac{1}{2}$ premium, but buyers of round sums readily obtained concessions of $\frac{1}{4}$ @ $\frac{1}{2}$ from the figure.

The Chicago Tribune of the 26th says:

We notice rather more demand for New York Exchange, but the supply is still so abundant that rates are unchanged. Bankers take it par @ $\frac{1}{2}$ per cent. discount. Gold opened at yesterday's rates, but was not so firm toward the close. The usual buying price was $2\frac{1}{2}$ premium.

Demand notes are still the standard of currency, and circulate freely, but in large lots they have been purchased for Custom-Houses and for banks at $\frac{1}{2}$ @ $\frac{3}{4}$ cent premium. The position of the banks in regard to these notes has been essentially changed by the late currency act. Instead of rejecting them excepting under stipulations, they are now anxious to receive them, and some of these institutions which received them on deposit with the understanding that checks were to be drawn payable in these notes, have been forced into the street to buy notes at a premium to meet these checks. It is due to the Bank of Commerce to state that it has always taken these notes from correspondents and depositors without any stipulation, and that it has acted throughout in the most patriotic manner in reference to the wants of Government, from the time of the first negotiation with Secretary Chase.

COMMERCIAL PROSPECT.

Samuel Hallett & Co. take the following hopeful view of the commercial prospect of the country:

The country has now passed through the most trying period, as far as its foreign commercial relations have been concerned, to which a civil war has exposed it, in a manner which has fully justified the ground taken by ourselves in the outset, that it could part with cotton as an article of export, and still maintain its position as creditor in the great family of nations. In an aggregate of exports for 1860, of \$372,000,000, cotton stood for \$191,000,000. The relation of the latter to the aggregate exports for 1861 was not much different.

At the commencement of the civil war, the crop for 1860-61 had fortunately nearly all reached market. That of 1861-62 none whatever. We have now reached a period at which the greater part of the crop has usually gone forward, and the whole of it in a position to be realized upon, without using a single cotton bill, or feeling the necessity of using one

to make good foreign balances against us. During the year just closed, we have imported at least \$50,000,000 in specie to make good balance in our favor, nearly the whole of which still remains in the country. Our mines in the same time have produced at least \$65,000,000.

The Northern States alone, without realizing a penny on cotton, have been able, within the year, to accumulate at least \$115,000,000 in the precious metals, as a capital to be drawn upon in the future, without foreign balances against us, or balances that will call for shipments of gold exceeding for the future the regular produce of our mines. The year that has closed has been one of great domestic losses, but no embarrassment whatever has been caused on account of foreign commerce, our importations having been reduced in vastly greater ratio than our exports.

But the opening of the Spring bids fair to find us in a stronger position than ever in reference to our foreign trade. There were never before such extensive accumulations of breadstuffs in the interior. These will begin to come forward in two months, upon the opening of the canals. We shall have, consequently, in greater abundance than ever, the staples which make up the bulk of our exports for 1861. In sixty days more, peace will be restored to the entire tobacco producing section of the country, with the exception of Virginia, so that this will be speedily added to the list of our exports. Kentucky and Missouri are now cleared of rebels in arms, and will soon resume their wonted commerce.

It is altogether probable that the next sixty days will witness the opening of every important cotton port, and order restored to a large portion of the Cotton States. We have seen enough to prove that all that is wanted to bring forward a large amount of the cotton is protection against a cabal, which has overawed the whole South, even in sections where the Unionists greatly outnumbered the Rebels. A fair crop has been grown. It must come to market. All that is wanting is a way, and this will soon be provided by the success of our arms.

In the next six months it is more than probable that we shall have cotton bills to the amount of \$100,000,000, in addition to exports from other sources quite equal to our imports, and which will create a balance to a nearly equal amount in our favor, a portion of which must be liquidated in gold; for under the high rates of duty which are likely to prevail, we do not see how we can largely increase our imports over the past year. Upon many articles which we have been accustomed largely to import, the duties are nearly prohibitory, and must immediately cause a large amount of capital to be invested in this country in their production.

As far as our foreign relations are concerned, everything is as favorable as could be de-

sired. We can not fail to keep other nations largely in our debt. At home, the prospect of a speedy termination of the war is fast solving some of the most difficult problems before us. We can certainly see the end of the war. The Treasury Note bill in its present shape is an unfortunate measure; but we trust we shall not repeat it. Certainly we need not, if Congress will only provide an adequate system of taxation. The worst feature in the future is an inflation in prices, and a wide difference in the market value of gold and paper currency; but this may in time be restored by providing adequate revenues, which shall convert the Treasury notes into machinery for their collection, and thus render the market and nominal value of the two currencies identical.

It is in the Government finances that all our danger for the future lies. The people of the North never possessed greater elements of prosperity. Their industries were never more prosperous and productive. If Government will display the prudence and capacity in the management of its affairs that the people have in theirs, all will be well. The Treasury Note bill has been, by the action of the Senate, divested of many of its worst features, though the most objectionable of all, the legal tender clause, still remains.

♣ Holders of the second mortgage bonds of the Terre Haute and Alton Railroad Company, who have not subscribed the bondholders' agreement and paid the ten per cent. assessment on the same, are notified that, if they desire to participate in the plan of the reorganization, they must subscribe to the said agreement and deliver their bonds to the purchasing Committee, No. 12 Wall street, by the 12th day of March next, or forfeit their privilege to participate in the purchase. Holders of third mortgage bonds are also notified that they must pay the assessment of five per cent on such bonds, and deliver the same as above by the same date or forfeit their privilege of participating in the reorganization.

N. W. BALDWIN, MATHEW BAIRD.
M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

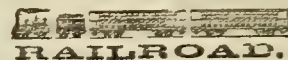
LOCOMOTIVE ENGINES,

in which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pairs of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability* they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

419 y

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:30 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T., 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M.; Chicago at 6:00 A. M., connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars. Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

KNOX & SHAIN,
Engineering and Telegraphic
INSTRUMENT MAKERS,
218 WALNUT ST., PHILADELPHIA.
(Two Premiums by Franklin Institute.)

OHIO & MISSISSIPPI
RAILROAD.
CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENTS, Cairo, and St. Louis.

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.
The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.
RETURNING—Mail Train Leaves East St. Louis, (Sundays excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN—Leaves East St. Louis daily at 4:45 P. M. arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office, No. 5 East Third street; No. 1 Burnet House, corner north-west corner of Front and Broadway; Spencer House Office; and at the Depot, corner of Front and Mill Streets.

G. B. McLELLAN, Gen'l Superintendent.
Omnibuses call for Passengers,
November 11th, 1861.

1861. 1861
FAST TIME.
LITTLE MIAMI
 (AND)
COLUMBUS AND XENIA
 AND
CINCINNATI, HAMILTON & DAYTON

RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation—From Little Miami Depot.

3:30 P. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Richmond, Indianapolis, and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express—From Cincinnati, Hamilton and Dayton Depot—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,
 General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
 No. 67 West 6th St. bet Walnut & Vine
 CINCINNATI O

W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

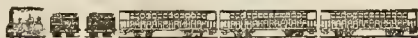
Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Order respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

1862. 1862.
Pennsylvania Central R. R.
285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE.
 FOR SAFETY, COMFORT AND SPEED,
 TO ALL THE EASTERN CITIES!
 THE TRACK IS STONE BALLASTED
 AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
 (with close connections from Western Cities.)
 ALL CONNECTING DIRECT TO NEW YORK.

THROUGH PHILADELPHIA,
 AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
 ONE TRAIN RUNS DAILY (430 MILES.)
 VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
 Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
 BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.
 ON NIGHT TRAINS TO
 Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

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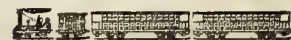
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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, MARCH 13, 1862.

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PUBLISHED EVERY THURSDAY MORNING,

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OFFICE—No. 167 Walnut Street.

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“ “ six months.....	12 00
“ “ per annum.....	20 00
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If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

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WRIGHTSON & CO.,
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To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the Record.

If Railroad officers will place us under obligations if they will forward promptly to this office the Annual Reports, Monthly Statements, and such other matters as they may deem worthy of publication.

Subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

Arrival and Departure of Trains.

	Depart.	Arrive.
Cincinnati, Hamilton & Dayton—		
Logansport & Chicago Express.....	7.30 A. M.	9.15 P. M.
1st R. I. C. T. & Sand, Mail.....	7.30 A. M.	5.45 P. M.
Dayton & Toledo.....	7.30 A. M.	9.15 P. M.
2nd. Ham. Accommodation.....	9.00 A. M.	8.10 P. M.
3rd. Richmond, Day. & Bell'n Ex.....	3.30 P. M.	9.15 P. M.
4th Dayton, Tol. & Detroit Ex.....	5.30 P. M.	11.25 A. M.
Logansport and Chicago Express.....	7.30 P. M.	8.10 P. M.
Glendale Accommodation.....	7.30 P. M.	7.00 A. M.
6th Columbus Express.....	10.00 P. M.	7.40 A. M.
Little Miami—		
Morrow Accommodation.....	7.40 A. M.	1.30 P. M.
2d. Day Express.....	9.45 A. M.	6.50 P. M.
Camp Dennison Accommodation.....	3.15 A. M.	6.10 P. M.
3d. Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
4th. Xenia Accommodation.....	5.50 P. M.	8.00 A. M.
Marietta & Cincinnati—		
1st. Mail Express.....	8.10 A. M.	10.05 A. M.
2d. Accommodation.....	3.30 P. M.	5.45 P. M.
Cincinnati, Wilmington and Zanesville—		
1st. Mail Express.....	9.45 A. M.	8.00 A. M.
2d. Accommodation.....	5.50 P. M.	6.45 P. M.
Ohio & Mississippi—		
1st. Mail Train.....	7.00 A. M.	10.05 P. M.
2d. Aurora Accom.....	3.15 P. M.	7.55 A. M.
3d. Express Train.....	7.20 P. M.	8.28 A. M.
Indianapolis & Cincinnati—		
1st. Mail.....	5.50 A. M.	9.45 A. M.
2d. Accommodation.....	2.45 P. M.	5.00 P. M.
3rd. Chicago Express.....	5.00 P. M.	12.20 A. M.
Kentucky Central—		
1st. Express.....	6.38 A. M.	10.44 A. M.
2d. Accommodation.....	2.24 P. M.	7.10 P. M.
Cincinnati & Chicago Air Line—		
1st. Mail.....	7.30 A. M.	9.15 A. M.

RAILROAD ROUTE FROM THE MISSISSIPPI RIVER TO PUGET SOUND—ADVANTAGES OF THE ROUTE OF LATITUDE FORTY-FIVE.

The time will come when a railroad to the Pacific will be a fixed fact; when the iron horse will snort across the western plains, and down the slopes of the Rocky Mountains, when a trip to San Francisco or Puget sound will be no more thought of, nor as much, as was a trip on the Hudson River, when it was first advertised to be made "through by day light," or as is now thought of a "trip to Lake Superior" during the hot weather. Neither do we believe that the generation is "yet to be born" who are to witness the completion of this great national work. We as much expect to live to see the day when a gentleman can fish in the Puget Sound, and send the product of his piscatorial sport to his friends and family in New York city, as we know that such things has been done for many years past from the pleasant waters of northern New York. James W. Taylor, Esq., formerly State Librarian of Ohio, and who has for many years thoroughly studied the geography of our unoccupied domain, in a lecture at St. Paul, Minnesota, advanced the following argument in favor of relinquishing the line of Stevens' railroad survey on latitude 47°, and adopting a route from southern Minnesota to the Missouri river in latitude 45°, thence bearing by the Black Hills and Crow country of Dakota Territory into Mullen's wagon road, which traverses the Rocky Mountains to Walla Walla, between the parallels of 46° and 47°.

Since 1854, the date of Stevens' survey and location, the gold discovery in British Columbia, and the organization of colonial governments on the North Pacific, have brought the eastern slope of the Rocky Mountains, north of Minnesota, prominently into notice. It is now admitted, that the country west of the settlements at Selkirk to the mountains, and extending from latitude 49° to 55°, is as favorable a grain and animal production as Michigan, Wisconsin and Minnesota. The mean temperature for spring, summer and autumn, observed on the 42d and 43d parallels, in New York, Ohio and Michigan, is accurately traced through Fort Snelling and the valley of the Saskatchewan to latitude 55° on the Pacific coast. This region, bridging the continent between Canada and British Columbia, will be promptly organized as a colony of England, with a mail and emigrant route from Fort William, on Lake Superior, to Fort Garry, and thence by Fort Edmonton and the gold fields at the sources of the Frazer River, to the British coast of Northwest America. With such a communication the railroad system of Northern Minnesota will connect near Pembina. These events of the near future will powerfully contribute to the construction of the line of the Minnesota and Pacific Railroad from St. An-

thony Falls, by way of St. Cloud, Crow Wing and Otter Tale Lake, to the international frontier.

Thus the world has found a better route than Stevens' line—further north and in British territory, but through a more fertile district. Its occupation may be left, with entire confidence, to the energy of the Canadian people and the sagacity of the English Government. The extraordinary productiveness of the Cariboo mines, in the northeast part of British Columbia, and the recent discovery of gold on the sources of the Saskatchewan and Peace rivers will hasten the development of Central British America.

Eight degrees of latitude south of the Cariboo mines of British Columbia, we have remarkable statements of new gold fields on the Salmon River in Washington Territory. A large emigration from California is flocking to them. They are far within the valleys of the Rocky Mountains, as nearly as possible due west of St. Paul, and about twelve hundred miles distant. Half way to this Salmon River district, between latitudes 44° and 45° a recent exploration by Lieutenant Warren, of the United States Topographical Engineers, has furnished interesting details of the Black Hills—a region as large as Connecticut—the most eastern spur of the Rocky Mountains, and where gold has been discovered. The Dakota Indians, who are attracted by the abundant game of the vicinity, have hitherto obstructed explorations; but the settlements of Dakota on the Sioux, James and Missouri Rivers, will doubtless send adventurers thither during the next summer. Once understood to be auriferous, the Black Hills can be reached in thirty days from St. Paul to Winona, being fully two hundred miles further east than the mines of Pike's Peak or Colorado.

It is proposed to substitute a mail and emigrant road by the Black Hills, and thence through the desirable country along the eastern base of the Rocky Mountains to the vicinity of the Salmon River mines, for the circuitous route by way of Breckinridge and Fort Union close up to the international frontier. A wagon road from Fort Rigley to the Missouri has already received the aid of the Federal Government. Let it bear north of west until its intersection with Mullen's wagon road from Fort Benton to Walla Walla.

All the railroad interests of Minnesota can be harmonized by such a modification. Northern Minnesota already looks to a Pacific connection through British America; and it is well known that the policy of the Minnesota and Pacific Railroad company is organized on this basis. All our other railway interests have a close relation to the valley of the Minnesota river, as the point of departure in the direction of the Columbia River and Puget Sound. The Falls of St. Anthony will yet be connected with the head of Lake Superior by railway. From the Falls we have the South-

ern Minnesota railway, with its grant of lands, to the south bend of the Minnesota river. The Transit, with its land grant, passes to Saint Peter, and thence west to the Big Sioux river below (close to) latitude 45°, its charter extending to the Missouri river. Chicago and Dubuque can be readily brought into this combination of railway routes, over the Minneapolis and Cedar Valley line to Owatonna and thence west. Finally, the main line of the Minnesota and Pacific pursues a line but slightly north of west to the Kandiyohi Lakes, whence a route far more eligible than to the mouth of Sioux Wood river would be slightly south of west, crossing the upper Minnetota at *Lac qui parle*, and forming a junction with the Transit on or near latitude 45°.

Passing from local considerations, an emigrant and mail route was urged, as one of four transits of the American Plains which are clearly indicated by the progress and prospects of settlements—these depending in a great degree upon the gold discoveries of the mountains. They are (1) the British route, starting at Fort Garry in 50° and reaching the Pacific coast immediately west of the Cariboo gold fields in latitude 54°; (2) the Dakotah route, starting from the Mississippi river between latitudes 44° and 45°, and bearing in a general north-west direction to the navigable channel of the Columbia river and Puget sound; (3) the Kansas route on or near 40°, moving due west to San Francisco; and (4), the Texas route, reaching and developing the mines of Arizona. Minnesota is interested in a continental policy, which shall give the foregoing American routes precisely identical advantages. With the happy restoration of the Union, the Lake and Gulf States must once more unite in resistance to a monopoly of government aid to the single line from St. Louis to San Francisco. All four routes—one British and three American—are a continental necessity, and notwithstanding that the plains of the interior, styled on maps the "American Desert," will sustain but little agriculture, still the mining districts already discovered justify the designation of the foregoing lines of transit. Along each let Indian title be instantly extinguished—let a mail route be established—open the lands to pre-emptors and military bounties—concentrate all the agencies of immigration, very much as Russia has done, to push a cordon of settlements from Moscow across Southern Siberia to Peking and the mouth of the Asiatic Amoor. If such a policy would be advanced by massing the American Desert into five states of the area of Texas, instead of fifty insignificant and clashing organizations, let it be done, throwing overboard forever the mongrel system of territorial legislation and administration.

 All legal obstacles to the building of the bridge across the Hudson River at Albany, N. Y., have been removed by the Supreme Court of that State.

WEST CHESTER AND PHILADELPHIA RAILROAD.

The annual report of this company for the year ending Dec. 31, 1861, is at hand. This road is a single track and twenty-eight miles in length. The capital stock of the company is \$500,000. Its bonded debt is as follows:

BONDED DEBT.

Eight per cent. mortgage bonds.....	\$548,008 33
Seven " " "	396,300 00
Ten " " "	600 00

Total bonded debt.....	\$944,908 33
The floating debt of the Company is.....	16,960 90

Adding to the above the capital stock and it will be seen that the road is thus chargeable with an aggregate of \$1,461,863 33, or about \$50,000 per mile of road constructed. The following is the statement of earnings for the year ending Dec. 31, 1861:

EARNINGS.

The earnings of the Road for the year have been.....	\$129,447 16
Earnings for 1860.....	128,235 66

Increase	\$1,211 50
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The expenses for the year, including salaries, have been.....	\$61,367 16
Expenses in 1860.....	55,579 91

Increase.....	\$5,787 25
---------------	------------

The net earnings for the past three years have been:

In 1859.....	\$45,257 91
In 1860.....	72,655 75
In 1861.....	68,080 00

The directors, in their report, say an analysis of the earnings for the year, under the respective heads of *passengers* and *freight*, will go far towards showing that the smallness of the increase of earnings is to be attributed to that unfortunate state of affairs into which our country was plunged last spring, and this is particularly observable in the item of freight, which began to exhibit a falling off in March, from which it has, as yet, but partially recovered.

Had the year been as prosperous as the preceding one, the managers do not doubt that they would have been able to show a large increase of earnings over those of that year. The earnings in January and February were such as to encourage this belief, being in excess of those in the corresponding months in 1860, \$1,978 21, while the decrease from March to October, inclusive, was \$4,841 86; of which \$3,422 20 was in the freight department. The managers, however, have satisfaction in believing that the period of greatest depression has been reached, and that the business of the road is now again steadily on the increase; the earnings, from passengers and freight, in November and December, having exceeded those in correspond months in 1860, \$2,271 33.

It will be observed that the net earning for 1860 exceeded those in 1861, \$4,575 75. A reference to the report of the Superintendent will show that the greater part of this amount is represented in the increased value of the rolling stock and material on hand, and was expended mainly upon those items which

are not properly chargeable to the expenses of one year, but should be averaged through a series of years. The rebuilding of a worn out tender, and extraordinary renewals of track, absorbed \$3,480 34 of the increased expenses, and the balance will be readily accounted for by the fact, that an additional train has been run during the year, involving not only additional expense for fuel, labor and repairs, but also for teaming and tolls.

The Board have endeavored to carry out the object of the resolution, adopted by the stockholders at their last annual meeting, relative to increased accommodations. A new locomotive was purchased, at a cost of \$6,250; and an additional passenger train was run during the greater part of the year. The prices of commutation tickets were revised and modified, and after many vain endeavors on the part of this company, an arrangement has at length been entered into with the Pennsylvania Railroad Company, by which coupon tickets are sold to West Chester at the same discount as to other points on the road.

On the nineteenth day of October, 1861, an agreement was entered into, upon favorable terms, between this company and the Pennsylvania Railroad Company, for the joint use of a portion of our road, as a means of access for that Company, to their new bridge over the Schuylkill, opposite the Philadelphia Almshouse. The bridge is not yet completed, and the Board has not been able to test the actual benefits of this contract, but are free to say that it may become prudent to lay an additional track on that part of the road, as it is expected that a large proportion of the eastward bound tonnage of that road will pass in this direction.

The Board regret to record the fact that in June last the Philadelphia and Baltimore Central Railroad passed into the hands of a receiver, notwithstanding the liberal efforts to retain it in the hands of the Company, by individual subscriptions for its bonds, and by the agreement reported to you at the last annual meeting, by which this Company proposed to receive those bonds for three years in payment for freight, upon a "satisfactory arrangement" being made for the continuance of the connection between the two Roads, this proposition alone being estimated as equal to a subscription for nearly \$50,000 of those bonds. The bonds were actually received for a time, but the Company having experienced great difficulty in getting even them, and not being able to obtain any "satisfactory arrangement" for the continuance of the connection, or any arrangement at all beyond mere individual promises, refused to receive the bonds in payment for freight altogether after the road went into the receiver's hands. The Board can not speak too highly of the advantage of that Road to this, and they have made every reasonable effort to secure a continuance of the connection between the two

Roads, but whether any, and if so, what further sacrifice should be made by this Company to that end must be left to the stockholders.

The debt of the Company, on January 1, 1861, exclusive of the bonds, and unpaid interest thereon, and also exclusive of the debt of \$16,000 00, already adverted to, was..... \$41,883 52
On January 1, 1862, it was..... 34,104 55

Decrease..... \$7,778 97
The unpaid interest on the seven per cent., ten per cent., and eight per cent. Bonds, due January 1st, 1861, was..... \$43,615 98
Add over due ten per cent. bonds..... 700 00

Same items January 1, 1862..... \$44,315 08
70,594 91

Increase..... 26,279 83
\$18,500 86

To which add increase in eight per cent. bonds issued..... 5,500 00

Making to be accounted for..... \$23,800 86

This amount may be distributed as follows:

Locomotive account..... \$6,330 00
New freight car..... 250 00
Construction, (water station, new sidings, etc.)..... 2,321 34
Arrears of ground rent due the Burd Est. (\$16,000 00) settled for..... 2,000 00
Interest in floating debt of 1860..... 1,826 33
Paid on account lot bought from Philip Lowry..... 1,000 00
Ground rents..... 2,231 66
Profit and loss..... 303 25
Increase of cash assets and material on hand..... 3,658 82
19,921 40

Balance..... \$3,879 46

The decrease in net earnings, \$4,575 75, will more than account for this balance.

The foregoing comparative statement of interest does not, however, correctly represent the amount due. It is believed that the coupons of ten per cent. bonds outstanding, heretofore reported as amounting to \$1,702 44, do not exceed \$210; the balance, in all probability, having been cut off before the bonds were issued. In like manner the coupons of seven per cent. bonds, due before July 1, 1859, reported as \$1,631 00, it is believed, were never issued, or if any of them were issued, will never be demanded. These errors arose from the confusion existing in the books and papers of the Company, consequent upon the possession of them by the Trustees, and their removal from the office. Making these deductions, the foregoing amount of bonds and interest, on bonds, due, or past due, on January 1, 1862, is reduced to \$67,471 47.

Of this amount, \$16,819 50 is interest on seven per cent. bonds, of which \$13,870 50 became due on that day; the balance, extending back to July 1, 1859, not having been called for. The remainder of the above amount, except \$810 ten per cent. bonds and coupons, is the unpaid interest on the eight per cent. bonds, extending back to October 1, 1859.

The board have continued to pay the current expenses of the Company in cash, and have also adhered to the policy of paying no more than six per cent. for the use of money.

The number of passengers carried during the year was 254,065, or 4,520 less than in 1860, or deducting the troops carried, 6,994

less than in that year. Of these no one was injured on the road.

There has been one train through run this year, more than in 1860.

The number of train miles run during the year was..... 103,515
Receipts, per mile run..... \$1 22
Expenses, per mile run, including teaming and tolls on city railroad..... 59.2

Engine expenses, per mile run:

Fuel..... 08.4
Repairs..... 05.2
Stores, etc..... 09.97
14.57

The following are the officers of the Company:

Marshall B. Hickman, *President*; William Apple, John Benningham, John Fallon, Thomas P. Gibbons, M. D., Zophar C. Howell, Michael Malone, Abraham Pennell, Samuel Riddle, Samuel J. Sharpless, *Managers*; William McCullough, *Treasurer*; A. Lewis Smith, *Secretary*; Henry Wood, *Superintendent*.

NEW HAVEN, NEW LONDON AND STONINGTON R. R.

The annual meeting of this Company was held at New Haven on the 23d inst. We have not yet been favored with a copy of the annual report. The following are, however, the statement of earnings as compared with last year:

The earnings of the road in 1860 were \$135,071 55; for 1861 they were \$112,419 75, showing a decrease of over \$22,000, while the extension road earnings for 1860 were \$42,930 45, and for 1861, \$63,140 39, being an increase of \$21,000.

The following plan was proposed for extricating the Company from its present difficulties:

Secure from the next session of the General Assembly a charter for a new Company, to be called the "Shore Line Railroad Company," with a capital stock of \$750,000, to be apportioned in shares of \$100 each. Said stock to be paid in first mortgage bonds and interest at par; second and third mortgage bonds at 25 per cent of their par value, and the stock at \$5 per share. Said Company to receive the road and entire property from trustees as soon as three-fourths of the first mortgage bonds are paid in toward said stock. Any party owning said first mortgage bonds, or holding them in trust not fully authorized or wishing to use them in payment for the stock of said Company, shall be entitled to receive the cash for them at their pro rata value on \$450,000 first mortgage bonds, as per the appraisal of three commissioners to be appointed by the General Assembly for that purpose.

The following resolution was adopted:

Resolved, That a committee be appointed to meet a joint committee from the parties interested in the first, second and third mortgage bonds of the New Haven and New London Railroad Company, and also a committee from the parties interested in the Extension Railroad, to take into consideration some plan for reorganizing and consolidating the several interests, and report at a future meeting.

After the adjournment of the stockholders, a meeting of the directors was held, and C. S. Bushnell re-elected President, and Wm. T. Bartlett Secretary and Treasurer.

NORTHERN CENTRAL RAILROAD OF MARYLAND.

Some disagreements having arisen between the officers of this Company and the city government of Baltimore, the City Council have adopted the following resolutions:

Whereas, The city of Baltimore by ordinance No. 57, and a supplement thereto, No. 77, entitled an ordinance to aid in the completion of a continuous line of railway, from Sunbury, Pa., to tide water at the city of Baltimore, under authority of an act of the General Assembly of Maryland, concurred in by the Commonwealth of Pennsylvania, passed in the year 1854, contracted with the Northern Central Railway Company, then about to be formed, and which was subsequently formed in accordance with the provision of the acts as aforesaid, to deliver to the said Northern Central Railway Company five thousand shares of the Baltimore and Susquehanna Railroad Company. Also a mortgage claim of eight hundred and fifty thousand dollars held by said city as the property of said Baltimore and Susquehanna Railroad Company, amounting together to the sum of nine hundred and fifty thousand dollars, on condition the said Northern Central Railway Company would complete a continuous line of railway from Sunbury, Pa., to tide-water at Baltimore; whereas the work on that portion of the line known as the section between Rockdale and tide-water at Baltimore, has been suspended since the year 1858, and there is now no evidence in possession of the city authorities, of a probable resumption of the work on said section, nor has the City Council received any official communication from said company, assuring a reason for the suspension of said work.

Whereas, it does appear, from the official and semi-official reports of the receipts of the said Northern Central Railway Company for the years 1859, 1860 and 1861, that its finances for those years have been most prosperous, exhibiting, after a deduction of 50 per cent. for working expenses, a net revenue of nearly \$1,700,000, a sum ample, after providing for the payment, regularly, of the interest accruing on all the funded debts of the company, including the amount of \$90,000 to the State of Maryland, and annually appropriating the requisite sums to the sinking funds, a balance in the treasury of said company, at the end of the present fiscal year \$600,000; and

Whereas, it does further appear, notwithstanding this apparent large balance of assets, the company is in arrears the following sums, viz:

Sinking Fund, Loan No. 1.....	\$70,000
" " " " No. 7.....	100,000
Amount due bondholders for interest.....	150,000
To the State of Maryland on annuity.....	117,000
	\$437,000

And whereas, besides the great loss to the trade and commerce of the city of Baltimore, by the failure of said company to complete the work according to the terms and conditions of the contract, the interest held by said city in said company is placed in jeopardy, in consequence of said company neglecting to provide for the engagements as aforesaid, which obligations have precedence over the city's interest in said company; and

Whereas, the State of Maryland, the city of Baltimore, and the citizens thereof, did contribute quite, if not all, the means provided for the construction of the Northern Central Railroad, 138 miles long, and in successful operation (102 miles being within the limits of the State of Pennsylvania,) and do now

hold four-fifths of the capital invested in said improvement; and,

Whereas, these large expenditures were made without reference to geographical limits, but in a spirit of enlarged liberality, not only to promote the trade of our city but to develop the resources of the country through which the line of road passes, thus nationalizing the sentiments and opinions of the people of the two States through the medium of a commerce mutually advantageous to both; and,

Whereas, it does also appear from the present organization of the Board of Directors, and the removal of the office of the company, from the city of Baltimore, there is a disposition to ignore the claims of our city and citizens to a just participation in the management and benefits of this public work;

And whereas, While the same spirit actuates the present Councils which induced the measures originally adopted to bring the corporations forming the Northern Central Railway into existence and harmonious action for the mutual benefit of all concerned, and there is now no disposition to embarrass the affairs of the company, the Council feels it due alike both to the city of Baltimore and our citizens, that some steps should be taken to secure a faithful compliance on the part of the company with the terms and conditions of its contract with the city of Baltimore; therefore,

Resolved, That the Joint Standing Committee on Internal Improvements inquire into the subjects embraced in the preceding preamble, and recommend means calculated to promote the interests of the city of Baltimore in connection therewith.

PATRIOTIC.—The Chicago, Iowa and Nebraska Railroad have agreed with Adjutant Gen. Baker, to carry soldiers over its road as follows:

All wounded in battle, either discharged or on furlough, *free*.

All soldiers discharged for disability, the causes of which occurred while in the service, and sick soldiers on furlough, one cent per mile.

All other soldiers two cents per mile.

THE SCHUYLKILL NAVIGATION COMPANY.

The following is the report of this Company for the year 1861:

The trade for the year amounted to 1,385,377 tons; of which 1,183,570 were of anthracite coal, and 201,807 of miscellaneous articles. This exhibits a total decrease of 265,839 tons, of which 172,608 were of anthracite coal, and 93,232 of miscellaneous articles. Of the whole tonnage 50,133 tons were of the trade from and to various points on the Union Canal. The business with that canal in 1860 was 46,289 tons. It will thus be seen that our trade has sympathized, to some extent, with the general business of the country.

The income for the year amounts to \$954,633 38, and is credited to the following accounts:

Toll on anthracite coal.....	\$842,891 23
Tolls on miscellaneous articles.....	51,881 48
Tolls on Union Canal Trade.....	27,826 15
Rents of real estate and water-power.....	27 128 19
Rents of office building.....	3,161 41
Interests and discounts received.....	1,741 92
Total.....	\$954,633 38

The charges against the income are as follows:

Cost of the care, maintenance and renewals of the works and improvements thereof, as per the report of the Chief Engineer.....	\$149,273 28
Car and landing expenses.....	89,214 16
Drawbacks allowed on coal.....	71,652 74
Drawbacks allowed to boatmen.....	42,243 70
Towing boats and vessels.....	22,523 62
Salaries of officers, collectors and clerks.....	20,010 00
State tax on preferred and common stocks.....	14,207 74
Land damages.....	895 40
Rent, taxes, repairs, and improvements of real estate, and all other current and incidental charges.....	44,184 79
Interest on loans, bonds and mortgages, and all other obligations of the Company.....	366,185 66
Payment of five cents per ton on 1,183,570 tons of anthracite coal to the trustees of the improvement bonds of 1870, for the interest and principal of said bonds.....	59,178 50
Tolls returned on coal frozen up in the canal in the year 1860.....	9,276 53
	\$881,906 12

The result is, that the income is \$174,602 15, and the charges, \$5,548 77 less than in 1860.

The accounts thus stated and settled leave a balance of 172,727 26, which has been accredited to the profit and loss account.

The present state of the profit and loss account is as follows:

Balance to credit of account, Dec. 24, 1860.....	\$346,388 66
Dividend account of 1858, 1859, and 1860, carried to credit of same account, per resolutions of the stockholders and loanholders, January 7, 1861.....	93,970 00
Balance of income and expense account for 1861.....	72,727 26
	\$513,085 92

The account is charged with the following appropriations of the credits as approved by the stockholders and loanholders, January 7, 1861:

Discount on improvement bonds of 1870.....	\$240,070 00
Boat accounts of 1859 and 1860.....	12,314 75
Dividend on preferred stock, payable in loan of 1876.....	173,013 00
	\$426,397 75

Leaving a balance to the credit of the account of..... \$86,688 17

Of the income of 1861, the sum of \$22,260 92 is payable in preferred stock of the Union Canal Company under the agreement of June 3, 1853. Deducting this sum, there will be left to the credit of the account \$64,427 24, of which \$52,991 79 have been appropriated for the payment of boats purchased since January 1, 1859, which are not included in the accounts of the trustees of the boat and car loans.

Adjusting the account in this way, there will remain a balance to its credit of \$11,435 45, which with the cost of \$35,500 improvement bonds of 1870, \$26,025, redeemed and cancelled in 1861, the managers propose to retain as a reserve for meeting any losses that may be sustained on the outstanding debts due to the company.

Improvement bonds of 1870.—The amount of these bonds outstanding December 24, 1860, was \$546,000. In the year 1861 \$35,500 of said bonds have been purchased and cancelled by the trustees, and surrendered to the Company.

The account of the trustees for said bonds for the year 1861 is as follows:

The balance in their hands Dec. 24, 1860.....	9,364 10
Received from Company five cents per ton on 1,183,570 tons anthracite coal.....	59,178 50
	\$68,542 60

Payments in 1861—

Interests on bonds.....	\$32,175 00
For \$35,500 bonds purchased.....	26,025 00
	\$58,200 00

Leaving a balance in their hands, for meeting interest due May 1, 1862, of \$10,342 60.

The discount allowed on said bonds having been cleared off by the resolutions adopted at the last annual meeting, the discount on the bonds purchased in 1861, amounting to \$9,475, has been carried to the credit of the general charges account.

The cost of the purchased and cancelled bonds, \$26,025, has been carried to the credit of the dividend fund of 1861, as directed by the ordinance of January, 1858.

The original issue of the bonds was \$666,500, of which \$156,000 have now been redeemed and cancelled, leaving the balance outstanding \$510,500.

Boat and Car Property.—On the 24th December, 1860, the liabilities of the Company for boat and car property, held by the trustees of the boat and car loan, were \$135,299 59, made up of the following items:

Boat loan of 1850.....	\$ 50 00
Boat and car loan 1855.....	118,750 59
Boat and car notes.....	16,499 00
	\$135,299 59

Payments for these accounts in 1861 were—

Boat loan of 1850.....	\$ 50 00
Boat and car loan, 1855.....	3,147 40
Boat and car notes.....	16,499 00
	\$19,696 40

Leaving a balance due on said accounts, December 24, 1861, of \$115,603 19.

The amount received from boatmen in 1861, on account of boats leased to them, was..... \$34,016 57

The charges to the account are—

Boat loans, and boat and car notes paid off as above.....	19,696 40
Repairs of boats in 1861.....	3,274 45
Interest on boat and car loans.....	7,010 50
	\$29,981 35

Balance..... \$4,035 22

As this balance was too small to appropriate as a payment on account of the instalment due November 1, 1861, on the boat and car loan of 1855, and as the income of the Company from other sources would not, in the opinion of the managers, justify any reduction of it for the payment of principal of the loan, it was determined to postpone the payment of the instalment until November 1, 1862.

New Boat and Car Account.—The balance of notes outstanding for this account,

December 24, 1860, was.....	\$173,454 69
Notes issued for boats purchased in 1861.....	74,935 19
Charges for repairs of boats in 1861.....	1,525 15
	\$249,915 03
Boat notes paid during 1861.....	76,605 19

Balance of boat notes outstanding December 24, 1861..... \$171,784 69

The charges against this account for the year 1861 amounted to \$78,130 34, while the receipts from the boatmen, on account of their leases for boats, were only \$25,138 55, the difference being \$52,991 79, which has been paid out of the income of 1861, and charged off as before stated.

The amount of principal due by the boatmen on their leases, and the cost of coal cars for this account, is \$238,091 73, while the liabilities of the Company for the same are \$171,784 69, showing a surplus, exclusive of interest, of \$66,306 54.

The purchases for this account in 1861 are 33 full-sized barges, and 12 section barges, carrying about 180 tons each, 4 barges of 130 tons burthen, and 1 steam barge, total 50.

The application of steam for our ordinary business has not proved economical; it is still on trial in two of the boats for some of the outside points, and, on the whole, we are not encouraged by the results to increase the

number of steam barges. We have caused the chinery to be removed from the *Northern Light*, and that boat is now run by animal power.

The anthracite tonnage was carried by 7,201 trips of boats, giving an average lading of 164 tons to each boat, the same as last year.

Owing to the general depression of business, the boatmen were compelled to make material reductions in their freights, and they were consequently unable to make full payments on their boat leases.

Arrangements for Business.—The increase of bridges over the river Schuylkill, at Philadelphia, has seriously interfered with the navigation of sailing vessels, and thereby impaired the value and convenience of the wharves and docks situated thereon, as places for receiving and shipping coal for points not accessible by canal boats.

The new bridges now in progress, and others authorized to be built, will add still further to such embarrassment.

Very large and increasing portion of our coal trade is shipped in sea-going vessels, and for several years we have been making arrangement to establish suitable shipping places on the Delaware river.

It will be recollected, that in the year 1856, we encouraged the Greenwich Land and Improvement Company to erect several large wharves on their property, by taking a lease of them for five years, at a liberal rent.

The lease expired on the first day of July last, and has been renewed for another term, ending April 1, 1864, at the reduced rent of \$6,120 per annum, with the condition, that if the shipments of coal therefrom, in any year, shall exceed 100,000 tons, 5 cents per ton shall be paid as additional rent for any such excess.

A contract for a lease has also been made with Mr. George N. Tatham for a very extensive wharf and dock which he is now constructing on Windmill Island. This will afford a capacious and safe harbor for boats, and a shipping capacity of 250,000 tons. The lease is to be for ten years from the completion of the work, at a rent of \$8,500 per annum, and the Company has the privilege of renewing the lease for a further term of ten years at the same rent, with the condition, that if for any year in such second term the shipments therefrom shall exceed 150,000 tons six cents per ton as additional rent shall be paid for any such excess.

A temporary arrangement has also been made with the same party for the wharf heretofore erected on the northern part of the same Island, which may be terminated by them upon three months notice after the first of March, 1863 or 1864, otherwise to continue for four years from April 1st, 1861. The rent to be paid for this wharf is five cents per ton on the quantity of coal or other articles received thereon. Since this wharf was fitted up 13,122 tons of coal have been received on it, and 11,950 tons shipped.

There are two other wharves on the Delaware fitted up by parties who have engaged in the business of reshipping coal, one at Allegheny avenue and one at Tasker street. To these gentlemen, and to two others who have been shipping coal from the wharves on the Schuylkill specially fitted up for the purpose, loans to a moderate amount have been made, to aid them in procuring machinery and fixtures, which are to be gradually repaid out of the allowances made for shipping expenses.

For a number of years during the life of the late Richard Harding, the Company has

occupied and paid a yearly rent for the Schuylkill front, extending from the termination of our works at the Fairmont Bridge to Hamilton street. This front is useful as a harbor for boats about to ascend the navigation, and has been found by long experience to be useful and convenient. During the present year we had an opportunity for obtaining a part of this river front on a redeemable ground rent, and we have accordingly taken up from two of the owners the southern portion, say about 210 feet front on the river by about 80 feet deep, for an annual rent of \$450 47. The remainder of the front is held for the term of five years, ending March 1st, 1866, at a rent of \$300 per annum.

The most important arrangement for business which has been made since the enlargement of the navigation in 1846 is the contract which has recently been entered into with the Mine Hill and Schuylkill Haven Railroad Company, which is to continue for ten years from January 1st, 1862. The details of this arrangement are fully set forth in the articles of agreement between the Companies, which are herewith submitted. This contract has been deemed necessary, in order to place the Company in an independent position for a participation in a fair proportion of the coal trade of Schuylkill county.

Hitherto the tributary roads from the mines to the two great trunk lines of the Schuylkill Navigation and Philadelphia and Reading Railway have been owned and managed by separate and distinct corporations, whose policy and regulation of charges were more inflexible than those of the trunk lines.

The management of the Philadelphia and Reading Railway, deeming it important that such charges and policy should be regulated in a different way, made overtures to, and succeeded in obtaining leases of, the Mill Creek and the Schuylkill Valley Railroads, and of the incomplete work of the Broad Mountain and Mahony Railroad, which latter work may be considered an extension of the Mill Creek road.

As the motive-power on these roads had for many years been supplied by the Philadelphia and Reading Railroad Company, and the business over them seeking the canal as its outlet to market had been furnished with proper facilities, the leases of the roads which made the control of the lessees more complete than it was before, was not objected to by us. But while this was the case, we deemed it prudent to attempt to secure the like control over the Mine Hill and Schuylkill Haven Railroad, from which source we have heretofore derived the largest portion of our tonnage, the trade for the year 1861, for example, being 812,013 tons out of 1,183,570 tons.

Our offer for such a contract was more acceptable than that of the Railroad Company, and its adoption has enabled us to tender to them the same equality of prices, service, and accommodation for the trade, which will seek their road from the Mine Hill Railway, as will be enjoyed by us on the roads leased and controlled by them, whereby a fair command of the coal trade will be held by both parties, and a proper basis for action be established. The powers thus secured by the two companies, if wisely and harmoniously administered, can not fail to be of immense importance to the coal interests of Schuylkill county.

Trade of 1861.—At the opening of the season it was arranged that the charges on anthracite coal should be the same as for the year 1860, with the exception that the first addition to the toll should be made on the 1st, instead of the 15th, of July, and the increase

of the way rates should begin on the same day instead of September 1st.

Additions were accordingly made on the 1st of July to the rates for way and through business, but the great falling off in the tonnage, both by rail and canal, and the general depression of the coal business, had reached such a point that it was finally agreed to make no addition to the charges in September. This conclusion was very reluctantly come to, because, by the arrangement for charges which had worked so well on the sliding scale in 1860, we had hoped to introduce that feature permanently into the business, and thereby make it the interest of the dealers to give regular employment to the transportation equipments. The same causes of disturbance, it is hoped, will not prevail in 1862, and every effort should be made to restore confidence in the permanence of a policy thus temporarily abandoned.

The failure to obtain the additional toll, and the diminution of the tonnage, have produced the falling off in our income, which has been noted in its proper place.

As the boatmen shared with us in both of the additions to the charges made in 1860, they have also shared this year in the reduction of income, the allowances made to them in 1860 being \$52,061 22, while this year they are \$42,243 70. In 1860 it was deemed advisable to allow a drawback on the large sizes of coal used chiefly for steam and manufacturing purposes, going to places beyond Philadelphia; this drawback was continued in 1861, and it has reached \$71,652 74 against \$52,285 26 paid in 1860.

It will be seen that a considerable reduction in the expenses for the care, repairs, and renewals of the works has been effected, the difference in these items being \$16,277 73. On an adjustment of the account for State tax on the stocks of the Company, the accounting officers of the Commonwealth insisted on charging the stock dividends as if paid in full cash, and after a strenuous effort on our part to have a different principle adopted, we acquiesced, and accordingly corrected our credits by adding \$5,080 44 for the tax of 1860.

The tax for 1861 has been adjusted on the same basis; it amounts to \$9,187 30, and thus accounts for the charge of \$14,267 74 in the account of 1861. Although we have not had as prosperous a year as that of 1860, we feel that we have been able to render you an account, which, all things being considered, should give you satisfaction, and inspire you with a hopeful confidence in the future.

VERMONT AND MASSACHUSETTS R. R.—The following are the earnings of this Company for the year ending November 30, 1861, as given to the stockholders at their recent meeting in Boston:

Income.....	\$200,645 38
Expenses.....	161,297 30
Balance.....	\$39,451 08

The earnings have decreased \$54,179 99, and the expenses \$31,180 15, during the year.

It will be seen that the expenses constitute a large proportion of the earnings of the road. As this road is 69 miles in length the earnings are nearly \$3,000 per mile of road. From this it would seem that it should be operated at a smaller per centage of the receipts.

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.		48	\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.		380	13,111,800	10,781,833	566,070	3,922,203	2,305,788	Sept. 30, 1880	Maryland Sterling Mortgage.....	3,000,000	5			
do do										Mortgage.....	2,500,000	6		1885	
do do										"	700,000	6		1880	
do do										"	1,128,500	6		1875	
do Washington Branch.....	Md.		30	1,650,000						"	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind.		118	1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7		1866	
do do										2d ".....	160,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	121	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1880						
do do															
Burlington and Missouri.....	Mo.		75	1,101,432	1,428,000		104,860	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.		96	3,708,400	8,880,000		1,997,065	733,950	Dec. 31, 1880	1st Mortgage.....	357,000	6		1864	
Central Ohio.....	Ohio.		137	In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1879	1st Mortgage.....	450,000			1861	
do do										1st ".....	800,000			1864	
do do										2d ".....	80,000			1865	
do do										3d " S. F.	950,000			1865	
do do										4th " S. F.	1,365,000			1876	
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1880.	1st Mortgage.....	140,000			1865 & 1870	
do do										2d ".....	600,000			1875	
Chicago, Alton and St. Louis.....	Ills.		222	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1880.	1st Mortgage.....	2,000,000				
do do										2d ".....	1,535,000				
Chicago and Milwaukee.....	Wis.			No report received.						3d ".....	1,000,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		194	2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	41 1/2	Feb. & Aug.	
do do										2d ".....	3,600,000	7	41 1/2	Feb. & Aug.	
Chicago and Rock Island.....	Ills.	53 1/2	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1881	1st Mortgage.....	2,000,000	6	11	May 1.	
Chicago, Burlington and Quincy.....	"	61 1/2	138	4,689,340	4,814,513		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	7	94	1870	
do do										2d " S. F.	813,000	7		1863	
do do										1st Mor. Chi. & Aur.	390,000	7		1869	
do do										2d " " "	303,000	7		1869	
do do										1st "Cent. Mil. Tract	390,000	7		1864	
do do										2d " " "	245,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.		60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000			1867	
do do										2d ".....	950,000			1860	
Cincinnati Wilmington & Zanesville ..	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d ".....	532,000				
do do										3d ".....	104,000				
Cleveland and Mahoning	Ohio.		68 1/2	1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,500				
do do										1st Mortgage.....	850,000	7			
do do										2d ".....	459,000	7			
do do										3d ".....	341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	6	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	8	13 1/2	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7		1873	
do do										3d 2d Ex.....	1,165,000	7		1865	
do do										4th 3d Ex.....	1,154,000	7			
Cleveland and Toledo.....	Ohio.	45 1/2	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jan. 1st Div.	350,000			1867	
do do										2d " 2d Div.	263,000			1872	
do do										1st " " "	265,000			1862	
do do										2d " Tol. Nor. & Cleve	521,000			1863	
do do										2d " " "	293,300			1863	
do do										Junction Income.....	44,500			1862	
do do										C. & T. Income.....	300,000			1864	
Cleveland, Columbus and Cincinnati.	Ohio.	109	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000			1864 & 1890	
Cleveland, Painesville and Ashtabula..	"		98 1/2	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1880	1st Mortgage.....	564,000			1861	
do do										2d ".....	303,000			1862	
Columbus and Xenia.....	Ohio.		54 1/2	1,490,000	290,700	50,500	See L. Miami.			Dividend.....	272,700			1860 to 1866	
Columbus, Piqua and Indiana.....	"		103	In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1880.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"		142	2,176,666	2,512,000					2d ".....	2,212,000	8			
do do										1st Mortgage.....	300,000				
Dayton and Western.....	Ohio.		38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	2,500,000	7		1875	
Detroit and Milwaukee.....	Mich.		186	No report						2d ".....	1,000,900	8		1866	
do do															
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.		111	No report											
Dubuque, Marion and Western.....	"		51	No report											
Eaton and Hamilton.....	Ohio.		36	469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.		132	986,061	1,219,100	249,868	124,140			2d ".....	400,000				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	181,000				
do do										2d ".....	1,993,000				
Galena and Chicago Union.....	Ills.		70	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,320,000		100	1862 & 1863	
do do										2d ".....	1,041,000		99	May 1, 1875	
Great Western.....	Ills.		175	1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,350,000	10			
do do										1st " E. D.					
Green Bay, Milwaukee and Chicago...	Wis.		64	400,000	No report										
Greenville and Miami.....	Ohio.		32	300,000	473,000	75,000	63,141	13,573		Land Mortgage...	5,000,000		67 1/2	1873	
Hannibal and St. Joseph.....	Mo.		206	1,041,966	10,554,000	220,356	996,907	512,933	Sept. 1, 1860.	Mortgage Conv.....	927,000	6			
do do										1st Mortgage.....	4,000,000		102	1869 & 1870	
Hartford and New Haven.....	Conn.		62	2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	2d ".....	2,000,000			1870	
Hudson River.....	N. Y.	37	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	3d ".....	1,640,000			1875	
do do										Optional.....	38,000			1868	
Illinois Central.....	Ills.	65	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Construction.....	12,885,000		83	1875	
do do										4th ".....	4,115,000	6		1875	
do do										Debentures.....	42,740				
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000				
do do										2d ".....	578,000	10			
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,284	140,689	448,858	230,834		Income.....	38,700	10		1866	
do do										1st Mortgage.....	500,000				
do do										2d ".....	400,000				
Indianapolis Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mortg...	200,000				
do do										2d ".....	649,984				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report								
Iron.....	Ohio.		13	118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.	
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000					
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st	229,000			1861		
do	do									2d	392,000			1873		
Kentucky Central (Covington and Lexington).....	Ky.		99	Sold out under mortgage	2,930,060	337,532	426,408	227,534		1st Mortgage.....	100,000	6				
do	do									1st	260,000	7				
do	do									2d " Conv.	1,000,000	7				
do	do									3d	600,000	7				
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiver.						1st Mortgage E. D.	903,000					
do	do									2d " E. D.	1,000,000					
do	do									1st Land Grant W. D.	4,000,000		12			
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report		June 30, 1861	1st Mortgage.....	130,000	6				
Lexington and Frankfort.....	Ky.		29	514,433	130,000		105,944	43,267	Jan. 1, 1862	1st Mortgage.....	1,300,000	6		1883		
Little Miami.....	Ohio.		61				1,330,050	529,981								
Louisville and Frankfort.....	Ky.		65	1,169,59	384,319		245,910	98,679	June 30, 1861	City Loan.....	174,000	6				
do	do									1st Mortgage.....	248,000					
Louisville and Nashville.....	Ky.		268	5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st Mortgage.....	2,000,000	7				
do	do									1st " Lebanon Br.	400,000					
do	do									1st " Memphis Br.	500,000					
Louisville, New Albany and Chicago..	Ind.		288	2,800,000	3,000,000	200,000	645,827	371,402								
do	do															
Madison and Indianapolis.....	Ind.		87	1,648,050	1,285,300	87,969	230,503	99,080	Dec. 31, 1860.	1st Mortgage	600,000	7		1861		
Marietta and Cincinnati.....	Ohio.		205	8,561,213	190,488	108,150	439,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868		
do	do									2d	2,000,000	7				
do	do									3d	1,500,000	7				
do	do									Sterling Income...	333,000	4				
Michigan Central.....	Mich.		54½	284	6,057,784	7,968,489	125,000	2,126,699	May 31, 1861	Domestic	928,617	6		1872		
do	do									1st Mortgage Sterling	467,483	8		1869		
do	do									1st " Conv.	500,000	8	100			
do	do									1st " unconv.	250,000	8		1860		
do	do									1st " Dollar Conv.	2,500,000	8		1869		
do	do									1st " S. F. Conv.	4,153,000	8		1882		
Michigan South'n & North'n Indiana	Mich. &		23½	246	9,018,200	9,714,704	437,886	2,075,459	Mar. 31, 1861.	Mort. Mich. So....	991,000	8		90	1860	
do	do									" Nor. Ind.....	985,000	8		81½	1861	
do	do									" Goshen Line.	1,168,000	8		82½	1868	
do	do									S. F. Toledo	2,350,000	8		85	1865	
do	do									2d Mortgage	2,465,000	8			1877	
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	7				
do	do									2d	200,000	8				
Milwaukee and Horicon.....	Wis.		42	1,101,200						1st Mortgage.....	420,000	8				
do	do									2d	600,000	8				
Milwaukee and Prairie du Chien.....	Wis.		20½	192	4,944,000	2,556,000			Dec. 31, 1860.	1st Mortgage.....	2,355,000	7		1891		
Milwaukee and Western.....	Wis.		71	No report			883,186	439,943								
Mississippi and Missouri.....	Iowa,		55	No report						1st Mortgage.....	1,000,000	7				
do	do									2d " S. F.	400,000	8				
do	do									Oskaloosa Div.	1,425,000	7				
do	do									Land Grant.....	7,000,000	7				
New Jersey.....	N. J.		33	34	4,397,800	688,000	992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000					
New Jersey Central.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.							
New York and Erie Pref.....	N. Y.		58½	Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860	1st Mortgage.....	3,000,000		100			
do	do		34½							2d	4,000,000					
do	do									3d	6,000,000			96		
do	do									4th	4,900,000			84		
do	do									5th	1,792,500			76		
New York and Harlem Pref	Conn.		30	138	5,717,190	6,055,732		1,142,851	433,716	Sept. 30, 1860.	1st Mortgage.....	2,950,000	7		101	1873
do	do									2d	1,000,000	7			1864	
New York and New Haven.....	Conn.		12½		3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	7			Dec. 1, 1866
do	do									"	978,000	6			Oct. 1, 1875	
New York Central.....	N. Y.		84½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.	7,925,000	6	98		May 1, 1883
do	do									Mortgage.....	3,000,000	7	104½		June 15, 1884	
Northern Central.....	Md.		138		2,260,000	5,890,300	537,925	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,085,500	6		1885	
North Missouri.....	Mo.				2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6			
Ohio and Mississippi, Eastern Div....	Ohio & Ind		192	Leased.	9,880,000	2,330,030	898,817	153,689	May 1, 1861.	1st Mortgage.....	2,193,500					
do	do									3d	316,995					
do	do									Construction.....	4,637,920					
do	do									Income.....	3,591,185					
Ohio and Mississippi, Western Div....	Ills.		148	.....	3,392,403		No report			State Loan.....	7,000,000	6		38		
Pacific.....	Mo.				3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W....	2,800,000	6			
do	do									Construction.....	4,500,000	6				
Pennsylvania.....	Pa.		359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,900,000	6		1888	
do	do									2d	2,319,000	6			1875	
do	do									2d " Sterling.	1,957,440	5			1875	
do	do									State Works....	7,200,000	5				
Peru and Indianapolis.....	Ind.		74		1,100,090	820,000	80,000	No report		1st Mortgage.....	2,300,000	6			1884	
Philadelphia, Wil. and Baltimore.....	Del.		98		5,600,000	2,300,000	1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6			1863	
do	do									1st Mort. O. & P.	1,000,000	7			1865	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	2d "	750,000	7			1866	
do	do									1st " O. & I....	1,000,000	7			1872	
do	do									2d "	380,000	7			1873	
Pittsburgh and Connellsville.....	Pa.		49		1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000				
Racine and Mississippi.....	Wis.		104		2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.						
Sandusky, Dayton and Cincinnati. .	Ohio.		170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1866	
do	do									"	997,000	7			1866	
do	do									"	1,000,000	7			1875	
Sandusky, Mansfield and Newark....	Ohio.		125		848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886	
do	do															
Springfield, Mt. Vernon & Pittsburgh..	Ohio.		56		403,975	500,000	100,000	110,200								
do	Ohio.		50		1,000,000	1,050,000	200,000			1st Mortgage.....	500,000					
do	do									2d	450,000					
Staubenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7			1870	
do	do									2d	900,000	7			1865	
do	do									1st Mortgage Conv.	1,000,000	7			1862	
do	do									2d " Conv.	2,000,000	7			1868 & 1870	
do	do									1st " Bel. & Ill.	517,000	7			1873	
Terre Haute and Richmond.....	Ind.		100	73	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7		1866	
do	do									1st Mortgage.....	3,400,000	7			Aug. 1, 1865	
Toledo, Wabash and Western.....	Ohio & Ind		54	243	2,123,500	5,996,049	52,389	233,546		2d	2,500,000	7			Nov. 1, 1879	
do	do									Mort. Coupons....	98,049	7			1860 to 1863	

THE PACIFIC RAILROAD.

Senator McDougall has reported a bill for a railroad and telegraph from the Missouri to the Pacific, of which the following is a summary:

It conveys — alternate sections per mile each side of the road. All lands not sold in three years after its completion may be settled and preempted at ten shillings per acre, to be paid to the company. These grants to be made upon the completion of every forty consecutive miles, and in addition to this land grant the Secretary of the Treasury is required to issue to the Company sixteen United States six per cent. thirty year bonds of \$1,000 each per mile, except for 300 miles along the base of the Sierra Nevada and Rocky Mountains—most difficult of construction—for which the number shall be trebled, for which bonds the Company is to issue to the United States a first mortgage on every forty miles, free from all incumbrances.

The Government to have preference in the use of the road and telegraph at reasonable rates, which, with five per cent. of the net earnings, is to be applied to the payment of their bonds.

The Company must file their assent to this act in the Interior Department within one year after its passage; locate the route within two years thereafter, and complete the road and telegraph from the western boundary of Kansas to the eastern boundary of Nevada Territory, before July 1, 1874. The road and telegraph to run from the western boundary of Kansas, or at the 102 deg. parallel of longitude west of Greenwich, at the termination of the Leavenworth, Pawnee and Western Railroad and Telegraph line, (which is to run from the Leavenworth, via Fort Ripley, to 102 deg. parallel), then westerly upon the most direct, central, and practical route, through the Territories of the United States, to the eastern boundary of Nevada Territory, there to connect with the Nevada Railroad line across that Territory, and which connects the Central Pacific Railroad of California, running thence to San Francisco. The track upon the entire line is to be of uniform width, and the grades and curve not to exceed the maximum of those of the Baltimore and Ohio Railroad; and the road and telegraph to be operated as one continuous line from the Missouri River to the Pacific coast.

The Hannibal and St. Joseph and Pacific Railroads may extend their roads from St. Joseph, via Atchison, and from Kansas City, to connect with the road through Kansas, and up to such point of junction double the amount of lands and bonds are to be granted to them and equally divided. In case all the roads provided for in the bill are constructed, and in case of failure of these companies to construct such connections, any company organized by the State of Kansas may construct a connection on the same conditions.

The Dubuque and Sioux City, the Mississippi and Missouri, and the Burlington and Missouri River Railroads, may construct a single line, not to exceed three hundred miles, from a common point on the western boundary of Iowa, to connect with the Kansas line, on the same conditions.

In case the Company incorporated by the bill does not complete the road and telegraph in a reasonable time, or keep the same in repair and use, Congress may pass an act to insure its speedy completion and use, and direct the income thereafter to be devoted to the use of the United States to repay all expenditures caused by default of the Company.

The Company is required to make an annual report to the Secretary of the Interior, showing the cost, income, and expenditures of the entire road and telegraph, and if the earnings, including the amount allowed for services rendered for the United States, after deducting all expenditures, shall exceed ten per centum on its cost, exclusive of the five per cent. to be paid to the Government, Congress may reduce the tariff of rate of fare, if unreasonable, and fix the same by law.

LAWS OF NEW YORK ON RAILROAD ACCIDENTS.

The following are the laws of the State of New York, relating to railroad accidents. The general law was passed December, 13, 1847, and the amendment April 7, 1849.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. Whenever the death of a person shall be caused by wrongful act, neglect or default, and the act, neglect or default is such as would (if death had not ensued,) have entitled the party injured to maintain an action and recover damages, in respect thereof, then and in every such case, the person who, or the corporation which would have been liable, if death had not ensued, shall be liable to an action for damages, notwithstanding the death of the person injured, and although the death shall have been caused under such circumstances as amount in law to felony.

SEC. 2. Every such action shall be brought by and in the names of the personal representatives of such deceased person, and the amount recovered in every such action shall be for the exclusive benefit of the widow and next of kin of such deceased person, and shall be distributed to such widow and next of kin in the proportions provided by law in relation to the distribution of personal property, left by persons dying intestate; and in every such action the jury may give such damages as they shall deem fair and just, with reference to the pecuniary injury resulting from such death to the wife and next of kin of such deceased person: provided that every such action shall be commenced within two years after the death of such deceased person.

SEC. 3. This act shall take effect immediately.

Passed April 7, 1849.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SEC. 1. The second section of the act entitled "An act requiring compensation for causing death by wrongful act, neglect or default," is hereby amended so as to read as follows: Every such action shall be brought by and in the names of the personal representatives of such deceased person, and the amount recovered in every such action shall be for the exclusive benefit of the widow and next kin of such deceased person, and shall be distributed to such widow and next of kin in the proportion provided by law in relation to the distribution of personal property left by persons dying intestate; and in every such action the jury may give such damages as they shall deem a fair and just compensation, not exceeding five thousand dollars, with reference to the pecuniary injuries resulting from such death to the wife and next of kin of such deceased person, provided,

that every such action shall be commenced within two years after the death of such person; but nothing herein contained shall effect any suit or proceeding heretofore commenced and now pending in any of the courts of this state.

SEC. 2. Every agent, engineer, conductor, or other person in the employ of such company or persons through whose wrongful act, neglect or default the death of a person shall have been caused as aforesaid, shall be liable to be indicted therefor, and upon a conviction thereof may be sentenced to a state prison for a term not exceeding five years, or in a county jail not exceeding one year, or to pay a fine not exceeding two hundred and fifty dollars, or both such fine and imprisonment.

SEC. 3. This act shall take effect immediately.

DAMAGES.—Three verdicts against the Hudson River Railroad have just been given at Hudson, N. Y. Alfred Webster recovered \$1,800, Delos Lull and wife \$500, and James Y. Bates \$100. for damages sustained by collision on the road, in April, 1860.

BALTIMORE & OHIO RAILROAD.

At a regular monthly meeting of the Baltimore & Ohio Railroad Directors, held at the Camden station on the second Wednesday of February, the following preamble and resolution were offered by Dr. James Armitage, director on the part of the city:

WHEREAS, The Baltimore & Ohio Railroad Company has asked the aid of the United States Government to secure to said company the opening of their road between Baltimore and Wheeling, and to protect the transit of passengers and merchandise over the same; and whereas, it is the opinion of many of the citizens of Maryland that the tardiness of the Government is in part dependent upon the fact that there has been, and may now be, a want of loyalty on the part of said corporation, or some of its officers or employees thereon; and whereas, for the purpose of removing said suspicion and more effectually securing the object desired, therefore be it

Resolved, That all officers, clerks, conductors, engineers, firemen, brakemen and employees of, or on, the Baltimore & Ohio Railroad, or in its service, or any who may hereafter be employed, be, and they are, hereby required on or before the first day of March, 1862, to take, repeat, and subscribe before some Justice of the Peace, the oath of allegiance to the Government of the United States, as provided by an act approved August 6th, 1861, entitled "An Act requiring an oath of allegiance," etc., in the following words, viz:

"I do make oath on the Holy Evangelists of Almighty God, that I will support, protect, and defend the Constitution and Government of the United States against all enemies, whether domestic or foreign, and that I will bear true faith, allegiance, and loyalty to the same, any ordinance, resolution, or law of any State Convention or Legislature to the contrary notwithstanding; and further, that I do this with a full determination, pledge, and purpose, without any mental reservation or evasion whatever; and further, that I will well and faithfully perform all the duties which may be required of me by law. So help me God."

Resolved, That an attested copy of said oath, so taken as aforesaid, shall on or before the 1st day of March, 1862, be filed with the secretary of this company, and upon the fail-

ure of any officer or employee to take and file the oath as aforesaid, his office, situation, or employment shall be forfeited and vacated from the first day of March aforesaid.

Resolved, That our national flag be displayed at all the more prominent stations on the road, and kept so until otherwise ordered by this Board.

A motion was made to reject, which was a virtual defeat, which prevailed by a vote of 19 to 6, as follows:—*Ayes*, Messrs. Brooks, Crane, Hammond, Miles and Tyson, on the part of the State; Messrs. Baynes, Wm. Hopkins, F. T. King, Poumairait and Sanders, on the part of the City; Messrs. Burnes, Craig, Hack, Harvey, Heald, Johns Hopkins, J. Spear Nicholas, C. Oliver O'Donnell and Taylor, on the part of the stockholders. *Nays*, Messrs. Beale, Dennis and Samuel Hinks, on the part of the State; Messrs. Robert Turner, J. T. Ford and Dr. James Armitage, on the part of the City.

As far as these resolutions are concerned, we take it that there is not one word or sentence contained therein at which any loyal citizen can take exceptions to. If so, in our humble judgment, they should at once resign and give place to others.—*Baltimore Clipper*.

STATISTICS OF RICE.

Rice, as an article of food and commerce, holds an important place among the staple products of the soil, and, in view of the enormous annual production (estimated by the best authorities at over 100,000,000 bushels), it is not a little remarkable that, up to the present time, no improvement whatever has been made upon the rude and imperfect rice cleaning machinery in use hundreds of years ago. A striking view of the rice business of the world, and the necessity of rapidity, economy, and thoroughness in preparing it for market, and a few statistics on its production and consumption, will be of interest here; and, in view of the great dependence so generally had among those (Eastern) nations upon rice as food, the quantity consumed has not been estimated less than 3 oz. per head per day—or, in round numbers, 70 lbs. per head per annum. The latest returns of the numbers in those countries give 691,343,916 souls, and the rice crops are estimated at 62,176,062,000 lbs.—about 50 per cent. greater than the Indian corn crop of the United States.

The following are the number of persons in the East whose food is chiefly rice, either grown on their own soil or purchased from each other:

RICE COUNTRIES.

	Population.	Lbs. consumed per annum.
China.....	450,000,000	40,500,000,000
Hindustan.....	134,301,000	12,060,000,000
Ceylon.....	1,710,000	153,100,000
Mauritius.....	192,000	17,280,000
Japan.....	50,000,000	4,500,000,000
Sumatra.....	3,000,000	270,100,000
Philippine.....	4,200,000	361,000,000
Java.....	6,000,000	540,000,000
Cochin China.....	15,000,000	1,350,000,000
Siam.....	3,000,000	270,000,000
Burmah.....	4,000,000	360,000,000
Aracan.....	5,000,000	450,000,000
Beloehistan.....	3,000,000	270,000,000
Malabar.....	1,140,916	102,682,000
Malay.....	3,000,000	270,000,000
Assam.....	15,000,000	1,350,000,000

Total..... 691,343,916 62,176,062,000

These countries produce other grains and articles of food to some extent, but rice is the chief fare, and when flesh is used it is usually cooked with rice. The consumption of the above countries being about 62,176,000,000 lbs., there remains for export a considerable quantity, which finds its way to the countries of Europe to a greater or less extent, accord-

ing to the rates of freight or the dearthness of food in Europe.

In addition to the rice-producing countries mentioned in the above table, we may state the Italian States grow rice largely, exporting, on an average, an amount valued at about 8,000,000f. Portugal grew in 1851, 11,000,000 lbs.; Spain grows it extensively on the coast of the Mediterranean; Russia produces a hardy variety of rice on the coast of the Sea of Azof and the Black Sea; Austria grew, in 1841, 105,000,000 lbs., chiefly on the coast of the Adriatic. In Egypt, and on the Island of Borneo, rice is grown in large quantities. The Cape Verde and Ionian Islands, European and Asiatic Turkey, Greece, and the States of Brazil, New Grenada, Venezuela, La Plata, Paraguay, Uruguay and the Guineas, in South America, produce rice—and, in some portions of their territories, in considerable quantities.—*Live Stock Register*.

COST OF TRANSPORTATION FOR THE UNITED STATES ARMY.

The following is a statement of all bills presented by railroad companies, for transportation for the United States Army, from April 1, 1861, to Feb. 1, 1862:

Alleghany Valley Railroad Company.....	\$1,302 28
Androscoog and Kennebec.....	7,084 80
Annapolis and Elk Ridge.....	5,780 00
Baltimore and Ohio.....	567,922 55
Boston and Worcester.....	10,011 53
Boston and Western.....	24 00
Buffalo, New York and Erie.....	3,584 00
Buffalo and State Line.....	43 28
Boston and New York Express Company.....	14 19
Boston and Providence.....	18,169 60
Cleveland and Pittsburgh.....	105,852 00
Chicago, Burlington and Quincy.....	1,138 00
Camden and Amboy.....	48,110 70
Cincinnati and Chicago Air Line.....	10,103 00
Cleveland, Columbus and Cincinnati.....	77 00
Cleveland and Toledo.....	9,232 43
Central Ohio.....	531 61
Cleveland and Mahoning.....	5 96
Cumberland Valley.....	52,661 00
Connecticut River.....	25,611 30
Cincinnati, Hamilton and Dayton.....	1 40
Columbus, Piqua and Indianapolis.....	65 38
Chicago and Milwaukee.....	1,437 50
Chicago and North-Western.....	186 99
Dayton and Michigan.....	4,518 00
Detroit and Milwaukee.....	14,032 19
Elmira and Williamsport.....	17,544 91
Eastern Railroad.....	1,191 25
Erie and North-East.....	18,654 86
Fall River Railroad Line.....	14,347 50
Hudson River Railroad.....	3,923 88
Hud. R. Troy and Bost., Rut. and Burlington.....	5,370 00
Huntingdon, Boston and Fall River.....	10,779 60
Hannibal and St. Joseph.....	5,536 92
Hartford, Providence and Fishkill.....	7 85
Iron Mountain.....	2,314 00
Indiana Central.....	193 66
Indianapolis and Cincinnati.....	70 20
Kennebec and Portland.....	13,321 59
Keokuk, Fort Des Moines and Minnesota.....	127 50
Little Miami, Columbus and Xenia.....	177 00
Lackawanna and Boonsburg.....	7 90
La Crosse and Milwaukee.....	8 00
Lake Shore and Michigan Steamers.....	8,454 08
Lafayette and Indianapolis.....	3 00 00
Michigan Southern and Northern Indiana.....	110,321 55
Milwaukee and Chicago.....	2 86 00
Milwaukee and Prairie Du Chien.....	30,581 93
Michigan Central Steamers.....	1,026 24
Northern Central.....	223,610 24
New Jersey Railroad.....	32,428 00
New York and New Haven.....	2,475 05
New York Central.....	1,283 79
North Pennsylvania.....	564 46
Norwich and Worcester.....	8,207 40
New York and Boston Express.....	739 48
Naugatuck Railroad.....	84 00
New York, Providence and Boston.....	201 08
New York and Erie.....	9,613 18
Old Colony and Fall River.....	20 16
Pittsburgh and Fort Wayne.....	2,315 84
Philadelphia, Wilmington and Baltimore.....	69,389 73
Philadelphia and Erie.....	13,135 18
Pennsylvania Railroad.....	255,534 82
Portland, Saco and Portsmouth.....	26,177 42
Philadelphia and Reading.....	3,850 44
Rutland and Washington.....	2,030 00
Stonington Line Railroad.....	8 48
St. Louis, Alton and Chicago.....	6,600 41
Terry Haute and Richmond.....	370 38
Troy and Boston.....	51 78
Western Railroad.....	5,062 64
Western, Boston and Worcester.....	2,054 08
Worcester and Nashua.....	1,105 20

MONETARY AND COMMERCIAL.

The condition of the money market is without any changes worthy of note since our last issue. The same story can be again told over again of money plenty for those who do not need it and difficult to obtain by those who do, unless they have the best of security to offer. This is well and will in time work out a healthy state of affairs. Whatever is done is obtained at the issued rates.

There has been a slight advance in the buying rates of exchange. Quotations are:

	Buying.	Selling.
New York Sight.....	par.	1 prem.
Philadelphia.....	par.	1 prem.
Boston.....	par.	1 prem.
Baltimore.....	par.	1 prem.
New Orleans.....	par.	1 prem.
Gold.....	1 prem.	2 prem.

The following statement shows the business of the Reading Railroad during the month of January, 1862, compared with the same month of 1861:

	1862.	1861.
Received from coal.....	\$124,123 21	\$105,474 30
Received from merchandise.....	40,007 62	32,080 40
Received from travel, etc.....	28,055 04	23,551 45
Total.....	\$192,215 37	\$161,106 15
Transportation, roadway, dumpage, renewal fund, and all charges.....	112,831 51	102,678 83
Net profits for the month.....	\$79,384 36	\$58,427 27
Net profits for previous month.....	135,433 56	128,412 56
Total net profit two months.....	\$234,817 92	\$186,839 83

The Milwaukee and Prairie du Chien Railway earned the third week in January:

Passengers.....	\$3,028 92
Freight.....	10,170 61
Mails and rent.....	1,015 94
Total.....	\$14,215 47
Corresponding week 1861.....	8,672 88
Increase.....	\$5,542 59

The following are the official earnings of the Cleveland and Pittsburgh Railroad for the first two months of the new fiscal year:

December, 1861.....	\$113,174 81
January, 1862.....	90,174 73
Total.....	\$203,349

Same time previous year:

December, 1860.....	\$63,980 91
January, 1861.....	62,208 27
Total.....	126,189 18

Increase in two months..... \$77,660 36

The earnings of the Cincinnati and Indianapolis road in December were:

1861.....	\$51,500
1860.....	32,000
Increase.....	\$19,500

In January the earnings show a fair increase, notwithstanding the through business was suspended for ten days by a freshet. In February the business was very satisfactory.

The following is a statement of the earnings of the St. Louis, Alton and Chicago Railroad from Feb. 16 to Feb. 23, 1862, inclusive:

	1862.	1861.
Passengers.....	\$5,834 47	\$6,530 85
Freight.....	7,700 35	13,165 53
Sundries.....	815 33	885 83
Total.....	\$14,340 15	\$20,582 21
Decrease in 1862.....	\$6,242 06	
Total this month to date.....	\$49,998 51	61,447 20
Total since Jan. 1.....	116,608 10	142,978 67

The locomotive power has been so much engaged recently in transporting troops, etc., that the ordinary business had to remain over, which accounts for the decrease.

NEW YORK AND HARLEM RAILROAD. — The annual statement of this company to the State Engineer gives the following summary of its business for the year ending September 30, 1861.

STOCK AND DEBTS.

Capital stock, as by charter.....	\$8,000,000 00
Amount of stock subscribed.....	5,717,100 00
Common stock.....	4,217,100 00
Preferred stock.....	1,500,000 00
Amount paid in, as by last report.....	5,717,100 00
Total amount now paid in of capital stock.....	5,717,100 00
Funded debt, as by last report.....	5,373,179 21
Total amount now of funded debt.....	5,337,064 41
Floating debt, as by last report.....	None.
The amount now of floating debt.....	43,788 53
Total amount now of funded and floating debt.....	5,381,452 94
Average rate per annum of interest on funded debt.....	7 7/8 cent.

*Real estate mortgages not included above, amounting to \$816,273 35.

EARNINGS.

Passengers.....	\$448,193 48
Freight.....	533,657 56
Miscellaneous.....	163,129 22

Total.....\$1,144,980 23

EXPENDITURES.

Transportation expenses.....	\$753,727 26
Interest.....	403,316 47

Total.....\$1,157,043 67

MILWAUKEE AND PRAIRIE DU CHIEN R. R. — From the annual report of this company for 1861 it appears that the cost of the railroad property under new organization is as follows:

Canceled of first preferred scrip stock with bonds attached.....	\$30,000 00
The trustees of the creditors of the M. and M. Railroad have canceled of full paid first preferred stock.....	34,600 00
Of full paid second preferred stock.....	66,800 00

Total canceled.....\$131,400 00

Deduct same from issues.....7,500,000 00

Leaves outstanding.....\$7,368,600 00

To wit:

First preferred scrip stock with mortgage bonds.....	\$2,526,000 00
First preferred stock, full paid.....	1,060,800 00
Second preferred stock, full paid.....	1,020,000 00
Common stock, full paid.....	2,761,800 00

Total.....\$7,368,600 00

The gross earnings of the main line, Southern Wisconsin and branch and ferry, are.....\$1,103,353 78

Ordinary operating expenses are.....\$592,156 62

Extraordinary expenditures are.....\$0,157 75

Total expenses.....672,314 57

Net earnings.....\$436,039 41

These earnings are from January 22, to December 31, 1861. The purchase price of the road was \$7,500,000; there is consequently under the new organization a reduction of \$132,000 since January 22, 1861.

The Grand Trunk and Great Western Railway Companies of Canada have completed the heads of an agreement for the fusion of the receipts of the two companies, and for the admission of the Buffalo and Lake Huron (should that company so elect) into a general agreement. The heads of the arrangement

have been unanimously approved by the Boards of the two companies, and so soon as they have been referred to Canada for the completion of some details, they will be laid in *extenso* before the proprietors of each company in London.

PITTSBURGH AND STEUBENVILLE R. R. — The joint committee of the Provisional Legislature of Virginia assembled at Wheeling, to which the resolution of the State of Ohio, asking a charter for a railroad from the City of Steubenville, Ohio, to the city of Pittsburgh, Pa., through the territory of Virginia, were referred, have reported in favor of the grant.

ERIE RAILWAY.

Great Broad Gauge, Double Track and Telegraph Route

TO

NEW YORK, BOSTON, AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb. 6. CHARLES MINOT, Gen'l Sup't.

N. W. BALDWIN,

MATHEW BAIRD.

M. W. BALDWIN & CO.

ENGINEER'S

BROAD AND HAMILTON ST.

Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

419 y

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANA. POLIS AND CINCINNATI SHORT-LINE



SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily for the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M.; Chicago at 6:00 A. M., connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,

W. H. L. NOBLE,

General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums by Franklin Institute.)

OHIO & MISSISSIPPI

RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCE

NES, Cairo, and St. Louis.

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas

and Nebraska; Hannibal, Quincy and keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.

RETURNING.—Mail Train Leaves East St. Louis,—

(Sundays excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M. arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office

No. 5 East Third street; No. 1 Burnet House, corner north-west corner of Front and Broadway; Spencer House

Office; and at the Depot corner of Front and Mill Streets

G. B. McCLELLAN, Gen'l Superintendent

Omnibuses call for Passengers,

Novemb 11th, 1861.

1861. 1861
FAST TIME.
LITTLE MIAMI
 AND
COLUMBUS AND XENIA
 AND
CINCINNATI, HAMILTON & DAYTON

RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Eaton, Richmond, Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.
 9:45 A. M.—Cincinnati Express—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh; via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.
 9:00 A. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty.
 7:40 A. M.—Morrow Accommodation—From Little Miami Depot.
 3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad for Forest. Connects with Greenville and Miami Railroad.
 4:00 P. M.—Accommodation—From Little Miami Depot. For Columbus and Springfield.
 5:30 P. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Richmond, Indianapolis and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.
 5:50 P. M.—Accommodation—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.
 7:30 P. M.—Glendale Accommodation.
 10:00 P. M.—Night Express—From Cincinnati, Hamilton and Dayton Depot—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.
 All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,

General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
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J. W. MORRILL.

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MORRILL & BOWERS,

(Successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction to all orders.

1862. 1862.
Pennsylvania Central R.R.
 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE.
 FOR SAFETY, COMFORT AND SPEED,
 TO ALL THE EASTERN CITIES!
 THE TRACK IS STONE BALLASTED
 AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
 (with close connections from Western Cities,)
 ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
 AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
 ONE TRAIN RUNS DAILY (430 MILES.)
 VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
 BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.
 ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
 D. A. STEWART, Freight Agent, Pittsburgh.
 CLARKE & CO., Transfer Agents, Pittsburgh.
 R. C. MELDRUM & CO., Madison, Indiana.
 J. E. MOORE, Louisville, Ky.
 W. W. AIKMAN & CO., Evansville, Ind.
 R. F. SASS, St. Louis, Missouri.
 CLARKE & CO., Chicago, Illinois.
 W. H. & E. L. LANGLEY, Gallipolis, Ohio.
 G. B. NEAL, Parkersburg, Virginia.
 HALL & CO., Marietta, Ohio.
 H. S. PIERCE & CO., Zanesville, Ohio.
 McDOWELL & McCOLM, Portsmouth, Ohio.
 R. MCNEELY, Maysville, Ky.
 J. P. JOHNSTON, Ripley, Ohio.
 JOHN TODD, Covington, Ky.
 G. L. HEATON, Cleveland, Ohio.
 R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—(via Allentown)—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
 L. H. HOUSTON, Gen'l Ticket Agent, Philadelphia.
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BUSH & LOBDELL.
Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,
 MANUFACTURE

CHILLED WHEELS

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TYRES,

FOR RAILROAD CARS

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LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS,

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the
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A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

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FINDINGS

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MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET
NEW YORK.

ALBERT BRIDGES.

JOEL C. LANE

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

through Distance 280 Miles;

42 Miles Shorter than any other Route.
NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M., 10:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-office and the Burnet House; No. 5 East Third-street; No. 169 Walnut street; Sixth Street Depot.

Freight trains leave at 6:00 P. M. and run directly brought to Chicago without rebilling or transhipment.

JOHN BRANT, JR., Superintendent.
 C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.,
 S. W. CHAPMAN, Gen. Freight Agent,
 Burnet House, Cincinnati, O.

W. M. F. HEWSON,
STOCK BROKER,

No. 21 West Third Street,
CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on Commission only; negotiates Loans and makes collection.

LOW'S RAILWAY DIRECTORY

FOR 1861

CONTAINING
THE NAMES AND RESIDENCESOF THE
PRESIDENTS, DIRECTORSAND
OFFICERS

OF ALL THE RAILROADS IN THE

UNITED STATES

If they could be ascertained.

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Price one dollar.

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the Railroad Record,

WRIGHTSON & CO. 167 Walnut Street.

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ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,

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McCALLUM, BRISTOL & CO.,
BRIDGE & DEPOT BUILDERS.McCallum, Bristol & Co., are prepared to construct
McCALLUM'S PATENT INFLEXIBLE ARCH
TRUSS BRIDGE, for Railroad and Highway purposes
at any point in Ohio, Indiana, Illinois, Missouri, Iowa,
Wisconsin and Minnesota on as favorable terms as any
other bridge and in the most approved and perfect
manner. Parties designing information, will please
apply to the firm at their Office 99 Third St., Cincinnati,
or to McCallum, Seymour & Hawley, No. 110 Broad-
way, N. Y. Ag. 26.MIDDLETON & STROBRIDGE,
LITHOGRAPHERS AND ENGRAVERS,

Walnut St., CINCINNATI.

Special attention given to all kinds of work in our line,
such as Show Cards in one or more colors, Maps, Bonds,
Portraits, Certificates of Stock, &c., &c.CONTRACTS for Rails at a fixed price, or on com-
mission, delivered at an English port, or at a por-
United States, will be made by the undersigned
THEODORE DEHON,
no1 10 Wal Broadway, New York

EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,

LOCOMOTIVE & RAILROAD
CAR SPRINGMANUFACTURER,
WILMINGTON, : DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

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Lafayette, Ind.,Columbus, O.,
Dayton, O.,
Indianapolis, Ind.,
Zanesville, O.We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to unravel, and leaving no chain or
ridge on the under side, the economy of thread, and adap-
tability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
now made.At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.If sent or call for a circular, containing all particu-
lars, prices, testimonials, etc.
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CORRUGATED SHEETS, OF ALL SIZES, constantly
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MATHEMATICAL AND PHILOSOPHIC-
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Drawing Instruments, Scales of all kinds, Barome-
ters, Thermometers, Spectacles, Microscopes, etc., al-
ways on hand. Repairing attended to.

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Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.,
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MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

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This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron
hammered. The whole operation from ore to finished Iron
is conducted at our own Works June 9.THE SCHENECTADY
LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness
the best and latest improved

COAL OR WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works being located on the New York Central
Railroad, near the center of the State, possess superior
facilities for forwarding their work to any part of the coun-
try, without delay.

JOHN ELLIS, President.

WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boli-
er Flues—from 1/4 to 10 inches outside diameter, cut
to definite lengths.Wrought Iron Welded Tubes—from 1/2 inch to
8 inches inside diameter, with screw and socket connec-
tions, for Steam, Gas Water, or other purposes, and fit-
tings of every kind to suit the same.Wrought Iron Galvanized Tubes—strong
and durable, designed especially for Water purposes.Cast Iron Gas or Water Pipe—from 1/2 to 24 inches in
diameter, and branches for same, &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS,
THOS. T. TASKER, JR.,CHAS. WHEELER,
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JAMES J. BUTLER, AGENT

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of the South and West. For sale by 1,000 leading Station-
ers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, MARCH 20, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

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On square, single insertion.....	\$1 00
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
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“ “ six months.....	40 00
“ “ per annum.....	80 00
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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

If Railroad officers will place us under obligations if they will forward promptly to this office the Annual Reports, Monthly Statements, and such other matters as they may deem worthy of publication.

Subscribers in Great Britain, 13s. 6d. (\$3) payable in advance.

Arrival and Departure of Trains.

	Depart.	Arrive.
Cincinnati, Hamilton & Dayton—		
Logansport & Chicago Express.....	7.30 A. M.	9.15 P. M.
1st R. I. C. T. & Sand. Mail.....	7.30 A. M.	5.45 P. M.
Dayton & Toledo.....	7.30 A. M.	9.15 P. M.
2nd. Hum. Accommodation.....	9.40 A. M.	8.10 A. M.
3rd. Richmond, Day. & Bell'n Ex.....	3.30 P. M.	9.15 P. M.
4th Dayton, Tol. & Detroit Ex.....	5.30 P. M.	11.25 A. M.
Logansport and Chicago Express.....	7.30 P. M.	8.10 P. M.
Glendale Accommodation.....	7.30 P. M.	7.00 A. M.
6th Columbus Express.....	10.00 P. M.	7.40 A. M.
Little Miami—		
Morrow Accommodation.....	7.40 A. M.	1.30 P. M.
2d. Day Express.....	9.45 A. M.	6.50 P. M.
Camp Dennison Accommodation.....	3.15 P. M.	6.10 P. M.
3d. Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
4th. Xenia Accommodation.....	5.50 P. M.	8.00 A. M.
Marietta & Cincinnati—		
1st. Mail Express.....	8.10 A. M.	10.05 A. M.
2d. Accommodation.....	3.30 P. M.	5.45 P. M.
Cincinnati, Wilmington and Zanesville—		
1st. Mail Express.....	9.45 A. M.	8.00 A. M.
2d. Accommodation.....	5.50 P. M.	6.45 P. M.
Ohio & Mississippi—		
1st. Mail Train.....	7.00 A. M.	10.05 P. M.
2d. Aurora Accommodation.....	3.15 P. M.	7.55 P. M.
3d. Express Train.....	7.20 P. M.	8.28 A. M.
Indianapolis & Cincinnati—		
1st. Mail.....	5.50 A. M.	9.45 A. M.
2d. Accommodation.....	2.45 P. M.	5.00 P. M.
3rd. Chicago Express.....	5.00 P. M.	12.20 A. M.
Kentucky Central—		
1st. Express.....	6.38 A. M.	10.44 A. M.
2d. Accommodation.....	2.24 P. M.	7.10 P. M.
Cincinnati & Chicago Air Line—		
1st. Mail.....	7.30 A. M.	9.15 A. M.

RAILWAYS OF CANADA.

Our neighboring Province of Canada, although slow to begin the railroad system, has already made fair progress in building a pretty thorough and well organized system of railroads, or as they term them railways, in the settled portions of the country. The following is the list of railways in the Province.

RAILWAYS IN OPERATION.

	Total operation length.	Miles in Canada.
Brockville and Ottawa—Brockville to Almonte.....	109	109
Perth Branch—Smith's Falls to Perth.....	10	10
Buffalo and Lake Huron—Port Erie to Goderich.....	159	159
Coburg and Petersburg—Coburg to Petersburg.....	28	28
Erie and Ontario.....	25	17
Grand Trunk—Portland Maine to Detroit Michigan.....	854	659
“ Quebec Div.—Richmond to Quebec.....	96	96
“ Riviere du Loup Branch—Chaudiere Junction to Riviere du Loup.....	118	118
“ London Branch—St. Mary's to London.....	21	21
Great Western—Suspension Bridge to Windsor.....	229	229
“ Toronto Branch—Hamilton to Toronto.....	39	39
“ Guelph Branch—Harrisburg to Guelph.....	28	28
“ Sarnia Branch—London to Sarnia.....	52	52
Lachine R. R.—Montreal to Lachine.....	8	8
London and Port Stanley—Port Stanley to London.....	24	24
Montreal and Champlain—Montreal to Rouse's Point.....	43	43
Montreal and New York—Montreal to N. York State Line.....	45	45
Northern—Toronto to Collingwood.....	95	95
Ottawa and Prescott—Prescott to Ottawa.....	54	54
Port Hope, Lindsay & Beaverton—Port Hope to Beaverton.....	74	43
Open from Port Hope to Lindsay..		
Stanstead, Shefford and Chambly—St. John's to Vermont State Line.....	106	
Open from St. John's to beyond Granby.		20
Welland—Port Dalhousie to Port Colborne.....	25	25
Total.....		2036

The area of Canada is 349,821 square miles, which would give about one mile of railway to 170 miles of surface. But as not one fifth the surface of Canada can be said to be inhabited, the proportion of railway to surface in the settled portions may be stated at about one mile in thirty. And even this must be given with the reservation, that if we draw the belt of population only around the thickly settled portions that contain the railways, it might be stated in somewhat greater ratio. Canada is remarkable for having one of the most gigantic railway corporations in the world—the Grand Trunk Railway Company.

This company, when its branches are all completed, will control 1131 miles of railway. Its share and debenture capital, in 1860, amounted to \$60,088,966, and its total liabilities of all kinds were \$70,733,326. This enormous enterprise has been a very unprofitable speculation to those who invested their money in it. Indeed, nearly all the Canadian railways may be placed in the same category. Commenced principally as commercial speculations, and relying for their construction on capital derived from the mother country, while promising great returns they have generally been sources of loss. We have frequently, hitherto, pointed out the causes of these disasters. They are very simple and should have been

understood in the beginning, and may be briefly summed up. 1st. The roads are at a great distance from their actual owners, and have been built and are operated by and under the supervision of mere agents. 2d. They are American railroads built at a cost of English railways, and operated in a country thinly settled. These causes alone are quite sufficient to account for all the extravagance that has been used in their construction and the consequent disappointment to the stockholders. The English capitalists who embarked their means in these enterprises, derived all their notions of the cost of the roads and the business they would do from the roads built in England. Consequently an expenditure which would justly alarm American stockholders was regarded as very economical by the English shareholders, and the delusion was only discovered when the promised returns were not forthcoming.

The Canadian system is very simple. It consists mostly of direct lines between the great centres of trade. The Grand Trunk extends from Quebec and Portland on the east to Detroit and Port Huron on the west, and is the great feature of the Canadian railways. The Great Western and Buffalo and Lake Huron, are continuations of the New York system across the peninsula between Lakes Huron, Erie and Ontario to the Michigan roads and the Lakes beyond. These with a few lateral roads constitute the whole as far as already developed. While these enterprises have so far been of little profit to their builders, they have been of great service to the country, and as the lateral avenues are opened towards the unsettled regions, will invite emigration and development on a rapid scale.

It is quite probable that at some future day the present east and west line will be extended to the Pacific ocean, to form a competitor to our own Pacific railroad yet to be built.

The most important commercial points on the present lines are Quebec, Montreal, Kingston and Toronto, in Canada, and Portland and Detroit in the United States. But as the country settles and its resources become more and more developed, other points will spring up, which may in the future rival some of these in importance.

The Canadian system is wholly the growth of the past ten years and its average ratio would be about 200 miles per year. As the population in 1852 was only 1,842,265, and that scattered over a great extent of country, this is a very fair rate.

JOURNAL OF THE FRANKLIN INSTITUTE.—The March number of this old and valuable scientific journal is duly at hand. Among the contents are a description of a Portable Cofferdam used at Fort Taylor, Key West, in 1861. An article on Iron clad Steamers. Extracts from a paper on the Concrete used in the late extension of the London Docks. Steel-Surfaced Rails. Alloys of Cadmium. Strength of Cast

Iron and Timber Pillars. Improvement in Telegraph Cables. Silvering Glass and other surfaces. Carburation of Gas. Bath for High Temperatures. Weirbach's formula for finding the Head due to the Friction of Water in Pipes. Form and materials for Iron plated Ships and the points requiring attention in their construction. White Gunpowder. Manufacture of Cast Steel. Improvements in the preparation of coloring matter. Filtration of Air. Improvements in the production of colors for dyeing and Printing and Writing Ink.

The contributors to the journal are all gentlemen of high position and scientific attainments. Subscription price \$5.00 per year. Address Journal of the Franklin Institute, Philadelphia, Pa.

PETROLEUM AND COAL OILS.

Experiments made by J. H. SALISBURY, M. D., with a view of determining a ready means for detecting oils that are unsafe to burn in coal oil lamps.

I. Tested a pure coal oil standing at 42½° Baume, at 60° Fah. by heating it to 150° Fah. and placing it in an earthen jar 2½ inches in diameter, and three inches deep. Filled the jar within ½ an inch of the top. When it had cooled down to 130° Fah. plunged in a well lighted match. The oil took fire. Cooled down to 120°, and plunged in a well lighted match. There was a slight flash of blue flame over the surface—without setting the oil on fire. The oil at this temperature would not take fire.

Cooled down to 115° Fah., I plunged in a well lighted match. No vapors. The match was at once extinguished. Repeated the operation several times; always with the same result. This oil is safe to burn at a temperature of 115° and at all temperatures below this point. Above 115° it is unsafe.

II. Tested a mixed oil, composed of 79 percent of heavy coal oil, 20 per cent of petroleum oil at 54° B., and one per cent of petroleum oil at 60° Baume. The mixed product stood at 43° B., at sixty° Fah.

Heated the oil up to 135° Fah. Placed it in the earthen dish before described, and allowed it to cool down to 125° Fah. Plunged in a well lighted match. There was a slight explosion of vapor on the surface, and the oil took fire.

Cooled down to 120°, and plunged in a well lighted match. There was a slight explosion of vapor and the oil took fire.

Cooled down to 115°, and plunged in a well lighted match, there was a slight explosion of vapors on the surface, but the oil did not take fire. Cooled down to 110° Fah., and plunged in a well lighted match. If allowed to stand at rest at this temperature for a few minutes, a sufficient quantity of gas accumulates on the surface of the oil to produce a slight explosion. The oil does not take fire. Cooled down to 105°—and plunged in a well lighted match. No explosion of vapors. No

vapors escaping from the oil at this temperature. At this and all lower temperatures this oil is safe to burn. Above 105° it is unsafe.

III. Tested a pure petroleum oil standing at 45½° Baume, at 60° Fah. Heated it up to 135° Fah., and placed it in the earthen jar before described. When it had cooled down to 127° Fah., plunged in a well lighted match. The vapors escaping exploded like gunpowder, and set the oil on fire.

At 115° exploded and set the oil on fire.

At 110° " " " "

At 105° " " " "

At 100° " " " "

At 95° " " " "

At 90° vapors were generated, and exploded on the surface of the oil, but did not set the oil on fire.

At 85° vapors were generated and exploded on surface of oil, but did not set the oil on fire.

At 80° a gas or vapor accumulated on the surface of the oil and exploded. At this temperature the vapors escape slowly from the oil—it requiring about from 5 to 10 seconds for enough to accumulate on the surface of the oil to produce an explosion.

At 75° no explosion. No vapors escape. At the temperature of 75° and all lower temperatures, this oil is safe to burn. But in warm weather, or in cold weather, if the lamp becomes heated above 75°, there is danger of explosion.

IV. Tested a heavy petroleum oil, where the lighter products (standing above 55 Baume) had been all taken out. The oil stood at 43° B. Heated the oil up to 130° Fah., and placed it in the dish before described. At 130° plunged in a well lighted match. Slight explosion, the oil taking fire.

At 125° Fah., slight explosion of vapor on surface of oil. Oil did not take fire. At 120° Fah. did not explode. No vapors escaping. At 120° and all below this temperature this oil is safe. Above 120° it is unsafe.

V. Tested a pure coal oil standing at 38° B., at 60° Fah. All the lighter products standing above 50° B. had been removed in refining. Heated it up to 150° Fah., and placed it in the jar before described.

At 145° Fah., plunged in a well lighted match. It was immediately extinguished. No signs of explosion. I did not heat it higher to determine at what temperature it would take fire, deeming 145° Fah. far above a safe standard.

The oils I, II, IV, V are known to be perfectly safe oils, as they have been thoroughly tested in all kinds of coal oil lamps, without ever exploding, or exhibiting any signs of it. II, however, I would not recommend, as there is a possibility that the lighter products might become vaporized and explode, although no instance of the kind has yet occurred. I, IV and V are perfectly safe.

III is extremely unsafe; yet this is the kind of oil that our market is filled with.

The manufacturers are buying the lighter crude petroleum for refining, on account of the small amount of chemicals it requires, and the facility with which it is distilled. All the products—light and heavy—as a general rule—are distilled over together, and this dangerous mixture is branded and sold in market for pure coal or mixed oil, and recommended as perfectly safe.

Any one who will submit it however to a careful test, will at once be convinced of its danger. It might possibly be burnt for weeks, without an accident, and then suddenly an explosion might occur. Such oil is liable to explode at any moment. Whenever the lamp gets heated up to the point where it generates vapor, and a sufficient amount of air gets mixed with the explosive vapors in the lamp, an explosion is sure to take place. Such oil is fit to burn only in a close chambered lamp, such as a fluid or camphene lamp. In any coal oil lamps now in use where there are holes from the combustion chamber, directly into the lamp bowl, it is very unsafe.

One reason why there is not more explosions from its use is that the draft in our coal oil lamps is quite strong upwards through the chimney. This prevents the air from working down into the bowl of the lamp and mixing with the vapors. If this draft however be by any means disturbed by currents of air or by endeavoring to blow the lamp out or by any other cause which introduces air into the lamp bowl (if the air is at a temperature where vapors are disengaged) an explosion is sure to occur.

Oils that will not generate explosive vapors, or take fire when heated up to from 105° to 140° Fah. by plunging into them a well lighted match, may be regarded as safe for burning in our present coal oil lamps. Those that generate vapors below 105° expose the consumer to more or less danger. 105°, then, might be taken as the lowest standard for safe oils. If an oil should explode at this or a lower temperature, throw it aside.

TRUCKS.—We are indebted to the N. Y. Metallic Car Spring Co. for excellent lithographic working drawings of various trucks in use on our most important and successful railroads. Among these are views of the truck now in use on the Little Miami railroad and the Clev. & Col. and Lake Shore lines. It is the simplest, strongest and cheapest truck that has been yet devised. The N. Y. Metallic Car Spring Co. deserve great credit for their enterprise in thus furnishing, free of cost to the roads, working drawings of this important part of a car. There is certainly need enough of improvement in the arrangements of many roads in this respect. We know of no better chart for their guidance than the sheet now before us. It will be sent to any one desiring it. Address N. Y. Metallic Car Spring Co., 54 William Street, New York.

BALTIMORE AND OHIO RAILROAD.—We are pleased to learn that the President of this Company has notified its agents that they are ready to receive freights for all portions of the line. It is to be earnestly hoped that this great thoroughfare will not again be closed.

ST. LOUIS AND IRON MOUNTAIN RAILROAD.*

NINTH ANNUAL REPORT.

The hopes that were, twelve months ago, entertained by the directors and friends of this road of material improvement in its business the past year, and for active operations by this time in extending the road south of Pilot Knob, have not been realized, for reasons familiar to every one. Every reasonable effort was made last winter to procure from the Legislature further aid for this extension, but they were unavailing.

The gross earnings this year are \$212,945.69. Those of last year, \$235,291.33. The expenses this year, however, have so far diminished, that the *net earnings* are \$67,023.58 against \$59,437.78 of last year. With these earnings have been paid off of the liabilities named in the last report \$16,601.25. There have been applied \$12,133.45 to construction account for station houses, sheds for sheltering cars, for steam car, and sundry other small items, leaving \$38,878.88 to be added to the assets. These assets when converted into money will enable the Company to pay off all liabilities except for interest on state and county bonds. These liabilities, on the 1st of October, are shown to be \$27,387.88.

The road and bridges (except Big river bridge) are in good condition throughout. On the morning of the 15th October, Big river bridge was burnt by incendiaries, which has caused great interruption in business: two bridges have been constructed this year; one of wood, over Sandy creek, which cost at the rate of twenty-two dollars per lineal foot; one of iron, over the Joachim creek, which cost at the rate of fifty dollars per lineal foot. The iron bridge is constructed after a model patented by Mr. J. L. Jones, a resident of St. Louis, combining the principles of the How truss bridge. It has been examined by practical iron manufacturers and thoroughly tested as to strength, and by every one is regarded a success. This is the first bridge built after this model; the first iron bridge west of the Mississippi river, and is constructed wholly of Iron Mountain iron.

The rolling stock, has the past year, been neither increased nor diminished, and is generally in good condition for service. At the beginning of the year the board appropriated ten thousand dollars for the construction of a steam or locomotive car to ply between St. Louis and Carondelet. This has been done under the direction of Mr. Hewitt. This steam

car has been run several trips very successfully, and bids fair, in ordinary times, to answer all the purposes desired; the cost for construction being less than thirty-seven hundred dollars.

The arrangement heretofore made with the city of St. Louis, for filling in Main street, between Miller and Lesperance streets, is being carried out as rapidly as possible. We have constantly engaged in this work one locomotive and thirty dirt cars, an engineer and four men; the work-house hands load the cars. Dirt has been filled in to the top of the trestling all along. Should nothing prevent, not many months will be required to open Main street between Miller and Lesperance streets to all kinds of vehicles.

Under the direction and patronage of the United States authorities the Western Telegraph Company have, this summer, erected a telegraph line throughout the length of the road.

It is worthy of remark that the outlays this year for damages to stock and property are only \$1,694.00; that of last year, for the same account, was \$3,290.00. Expenses for extraordinary repairs of locomotives and cars for injuries received on the road this year are \$1,788.04, against \$6,216.24 of last year. These favorable differences, we believe, are largely due to the wise policy which the Board, a year ago, adopted in rewarding enginemen and firemen for avoiding, for stated periods, accidents by collisions, running off the track, killing stock, etc. If this policy is valuable as promoting economy, how much more valuable is it as furnishing additional security of life to passengers. About one thousand dollars have this year been appropriated in this manner in which nearly all our enginemen participate.

BALANCE SHEET, OCTOBER 1, 1861.

Capital stock, shares subscribed.....	\$2,037,600 00
19,657 shares paid in full.....	1,965,700 00
719 shares paid in part.....	5,427 50
Bonded debt, State of Missouri bonds.....	3,501,000 00
Net earnings, to October 1, 1860.....	146,531 46
Gross earnings, for twelve months ending October 1, 1861.....	212,945 69
Floating debt, October 1, 1861.....	27,387 88
Construction, total cost of road and equipment, including Potosi branch and discounts and interest.....	\$5,532,061 96
Transportation expenses, for 12 months ending October 1, 1861.....	145,922 11
Assets on hand, October, 1861.....	180,988 46
	\$5,858,992 53
	\$5,858,992 53

Statement showing the receipts and disbursements from October 1, 1860, to October 1, 1861.

Receipts.	Disbursements.
Stock subscription.....	\$590 00
Transportation earnings for twelve months to October 1, 1861.....	212,945 69
Liabilities of October 1, 1860, paid during the year.....	\$16,601 25
Construction account audited and paid in twelve months, to October 1, 1861.....	12,133 45
Transportation expenses twelve months to October 1, 1861.....	145,922 11
Assets increased as per statement.....	38,878 88
	\$213,535 69
	\$213,535 69

STATEMENT SHOWING THE GROSS EARNINGS OF THE ROAD FROM OCTOBER 1, 1860, TO OCTOBER 1, 1861, 12 MONTHS.				
Months.	Passengers.	Freight.	Mails, Rents, &c.	Total.
October.....	\$7,309 25	\$13,546 95	\$737 50	\$21,593 78
November.....	5,656 58	13,970 60	737 50	19,713 05
December.....	6,327 14	10,408 80	737 50	16,408 34
January.....	4,568 56	8,023 95	737 50	13,336 40
February.....	3,753 95	8,405 85	737 50	13,138 48
March.....	4,970 05	11,534 00	737 50	17,245 99
April.....	4,754 50	16,812 30	737 50	22,307 30
May.....	5,056 00	11,448 55	737 50	17,337 73
June.....	3,720 00	4,481 00	737 50	8,970 50
July.....	3,138 85	2,800 00	737 50	6,732 52
August.....	9,394 20	4,026 55	737 50	14,794 07
September.....	4,153 72	4,430 00	737 50	9,321 22
Balance of transportation for Government, since May 1, 1861.....	19,754 91	11,071 40		30,826 31
	\$81,461 71	\$120,210 25	\$8,837 74	\$212,945 69

Statement showing the expenses for twelve months to October 1, 1861.

MAINTENANCE OF ROADWAY	
Repairs of Road.....	\$27,558 47
" Bridges.....	12,733 99
" Gravel, iron and hand cars.....	767 51
	\$41,059 97

MAINTENANCE OF ROLLING STOCK AND MA-CHINERY.	
Repairs of Engines and tenders.....	12,676 62
" Passenger and baggage cars.....	5,612 92
" Freight cars.....	7,575 66
" Machine shops and engine houses.....	701 56
" Tools and machinery.....	1,768 95
	\$28,335 91

OPERATING EXPENSES.	
Repairs of station buildings.....	681 99
" Wood and water stations.....	234 96
General superintendence.....	9,376 81
Agents and clerks.....	6,986 41
Conductors, baggage and brakemen.....	8,501 72
Porters, watchmen and switchmen.....	5,080 68
Enginemen and firemen.....	11,984 66
Fuel consumed by locomotives.....	12,660 00
Oil, tallow and waste.....	3,097 20
Loading and unloading freight.....	1,376 43
Loss and damage to Persons.....	61 90
" Property.....	1,694 40
" Goods.....	325 57
Printing and advertising.....	1,026 55
Rent and taxes.....	6,174 88
Office expenses.....	2,079 93
Station expenses.....	787 04
Contingencies.....	3,011 50
Water Supply.....	1,150 22
Telegraph.....	233 98
	\$76,526 83
	\$145,922 11

Statement showing the liabilities, or floating debt, exclusive of interest on state bonds.

Bills payable.....	\$451 45
Accounts audited and unpaid, including pay rolls for September.....	16,490 17
E. D. Morgan & Co., New York, they holding as collateral \$25,000 bonds of American Iron Mountain Company, and \$50,000 bonds city of Carondelet.....	10,150 91
J. B. Stewart, book account.....	275 00
Sundry accounts.....	20 35
	\$27,387 88

The assets October 1, 1861, were \$180,988.46.

Statement showing the number of miles run by locomotives, from October 1, 1860, to October 1, 1861.

Months.	With Passengers.	With Freight.	Other Running.	Total Miles run.
1860.				
October.....	11,029	8,221	3,591	22,841
November.....	9,983	9,567	3,106	22,656
December.....	8,637	9,546	3,490	21,673
1861.				
January.....	6,457	8,415	2,908	17,780
February.....	5,770	7,764	2,673	16,207
March.....	3,874	9,483	2,991	16,348
April.....	3,765	13,287	3,826	20,878
May.....	10,456	7,560	3,265	21,281
June.....	4,704	7,463	3,000	15,167
July.....	5,900	8,288	2,964	17,132
August.....	11,875	10,585	1,700	24,160
September.....	6,522	11,730	2,275	20,527
	88,972	111,889	35,789	236,650

Statement showing the different kinds of merchandise transported during the year ending October 1st, 1861.

	Tons.
Lumber.....	4,597
Pig iron.....	14,294
Iron ore.....	8,468
Iron blooms.....	1,259
Live stock.....	1,948
Coal, lime, &c.....	758
Lead.....	2,695
Products of the forest.....	16,645
Products of animals.....	269
Vegetable products.....	383
Agricultural products.....	2,369
Manufactures.....	599
Merchandise.....	3,473
Other articles.....	3,300

Total number tons moved.....60,957

Statement showing the number of through and way passengers, and number of tons of freight transported each month, October 1st, 1861.

Months.	Through Passengers.	Way Passengers.	Total Passengers.	Tons of Freight.
1860.				
October.....	485	18,431½	18,916	6,776
November.....	323	15,660	15,973	6,707
December.....	271½	14,535	14,806	6,669
1861.				
January.....	254½	11,929½	12,184	5,129
February.....	328½	10,324½	10,553	5,359
March.....	268	13,519	13,787	6,098
April.....	277	13,025	13,302	8,540
May.....	266½	13,247½	13,515	5,052
June.....	197½	11,355	11,552½	2,164
July.....	146	10,605½	10,811½	1,272
August.....	1,803½	16,927	18,730½	1,993
September.....	7,159	28,447½	35,607	5,098
Total.....	11,680	178,057	189,737	60,957

Number of passengers and tons of freight carried one mile during the year ending October 1st, 1861..... 3,063,125 3,302,931

Statement showing the entire cost of road, including Potosi Branch, rolling stock, and discounts, and interest, to October 1st, 1861.

Graduation, masonry, bridges and superstructure, including iron, &c.....	\$3,341,078 07
Station buildings, engine houses, machine shops, machinery, &c.....	180,997 34
Land damages and real estate.....	150,242 08
Contingent expenses and legal services.....	63,876 22
Potosi Branch Railroad.....	67,969 35
Engineering.....	156,262 11
Rolling stock.....	344,606 58
Discounts and interest.....	1,227,050 21
	\$5,532,081 96

Disbursements on account of construction from October 1st, 1860, to October 1st, 1861.

Fencing.....	\$296 41
Superstructure.....	22 35
Filling Main street.....	3,059 95
	\$3,378 71
Station buildings.....	965 10
Machine shops and engine houses.....	1,282 77
	2,247 77
Land and land damages.....	1,249 46
	1,249 46
Engineering.....	24 70
Potosi Branch Railroad (fencing).....	414 00
Steam car.....	3,436 88
Interest and exchange.....	1,181 93
	\$12,133 45

Rolling stock belonging to the road October 1st, 1861—16 locomotives, 7 first class passenger cars, 3 second class passenger cars, 3 baggage cars, 17 box freight cars, 8 cattle

cars, 154 platform cars, 30 gravel cars, 13 hand cars, 1 steam Car.

DIRECTORS.—Stephen D. Barlow, Carlos S. Greely, Jules Valle, Daniel G. Taylor, Geo. Partridge, Ferdinand Gottschalk, Bernard Peopping, Frederick Hill, Isadore Bush, James Lindsay, Benjamin Farrar, John H. Morse, John Evens.

OFFICERS.—Stephen D. Barlow, President and Superintendent; Carlos S. Greely, Vice President; Addison Ware, Secretary and Auditor; Robert M. Fry, General Ticket and Freight Agent; John Hewitt, Master Machinist; Alfred Hebard, Road and Bridge Master; James Taussig, Attorney.

TAX ON RAILROADS.

The following are the sections of the proposed tax bill which apply to railroads. The bill is now before Congress where it will probably undergo some alterations.

SEC. 78. *And be it further enacted*, That on and after the first day of May next, any person or persons, firms, companies or corporations owning, possessing, or having the care or management of any railroad or railroads using steam power thereon, shall be subject to and pay a duty of two mills per mile for each and every passenger carried on said railroad or railroads: *Provided*, That when season or commutation tickets are issued or sold, entitling the holder to travel or pass over any railroad or railroads daily for any number of days, not less than thirty consecutively, it shall be lawful for any owners, possessors or the agents thereof of said railroad or railroads to return, account for and pay, in lieu of two mills per mile for each and every passenger carried holding, or entitled to hold, such season or commutation tickets as aforesaid, a duty of three per centum on the gross receipts for any and all such season or commutation tickets; and any person or persons, firms, companies, or corporations owning, possessing, or having the care or management of any steamboat, or other vessel propelled by steam power, except ferry boats, shall, on and after the day as aforesaid, be subject to and pay a duty of one mill per mile, reckoning the actual or estimated distance from the place of embarkation to the place of landing, for each and every passenger carried on said steamboat or other vessel, except ferry boats, propelled by steam power as aforesaid; and any person or persons, firms, companies or corporations, owning, possessing or having the care or management of any railroad or railroads, the motive power of which not being steam, ferry boats or other vessels used as ferry boats, propelled by steam or horse power, and omnibuses or carriages, whose business it is to run hourly or at other stated intervals of the day from one part or place of a town or city to some other point or place in the town or city or out of it, and return, shall be subject to and pay a duty of three per centum on the gross amount of receipts derived from carrying passengers in any manner as aforesaid; and the owner, possessor, or person or persons having the care or management of such railroads, steamboats, ferry boats or other vessels or carriages as aforesaid, shall, within thirty days after the end of each and every month, commencing as heretofore mentioned, make a list or return to the assistant

assessor of the respective districts where such railroads are located, or where such steamboats or other vessels or omnibuses or carriages belong with the number of miles passengers have been carried as aforesaid, and the amount, if any, of the season or commutation tickets as aforesaid, together with the whole amount of duties which have accrued or should accrue thereupon, which return shall be verified by oath or affirmation of the owners, possessors, agents, or proper officer of said firms, companies or corporations, in the manner and form to be prescribed from time to time by the Commissioner of Internal Revenue, under the direction of the Secretary of the Treasury, and shall also, monthly, at the time of making said return, pay to the collector or deputy collector of the district, as aforesaid, the full amount of said duties; and the owner, possessor or person or persons having the care or management of any such railroads, ferry boats, or vessels, or omnibuses, or carriages, as hereinbefore described, shall, within thirty days after the end of each and every month, commencing as heretofore mentioned, make a list or return, and render the same to the assistant assessor of the respective districts where such railroads are located, where such ferry boats or vessels, or omnibuses or carriages, as aforesaid, belong, of the amount of gross receipts derived from carrying passengers in any manner, as aforesaid, together with the amount of duties which have accrued or should accrue, which list or return shall be verified by oath or affirmation of the owners, possessors, agents, or proper officer of said firms, companies or corporations, in manner and form from time to time to be prescribed by the Commissioner of Internal Revenue, under the direction of the Secretary of the Treasury, and shall also monthly, and at the time of making said list or return, pay to the collector or deputy collector of the district, as aforesaid, the full amount of said duties; and in case of neglect or refusal to make said list or return, as aforesaid, for the space of thirty days after the time when said list or return should have been made as aforesaid, the assessor or assistant assessors shall proceed to estimate the duties as heretofore provided in other cases of delinquency; and in case of neglect or refusal to pay the duties, as aforesaid, for the space of thirty days after said duties become due and payable, said owner, possessor, or person or persons having the care or management of said firms, companies or corporations, shall pay in addition thereto a penalty of five per centum on the amount due; and in case of fraud or evasion, whereby the revenue is attempted to be defrauded or the duty withheld, said owners, possessors, or person or persons having the care or management of such firms, companies or corporations, shall be subject to and pay a penalty of ten dollars for each passenger carried and not properly accounted for, or to a penalty of one thousand dollars, at the discretion of the court; and all provisions in this act in relation to liens and collections by distraint, not incompatible herewith, shall apply to this section and to the objects therein embraced: *Provided*, That all persons, firms, companies or corporations as aforesaid, shall be exempt from any duty for any passengers carried by them, or any of them, as aforesaid, when carried free or without charge: *Provided further*, That all railroad companies are hereby authorized to add the duty or tax imposed by this act to the rates of fare, any limitation which may exist in the charter of said companies or laws of any State to the contrary notwithstanding.

THE LEGAL TENDER NOTE BILL.

The following is an official copy of the Loan and Treasury Bill, passed by Congress, and approved by the President on the 25th ult.:

An Act to authorize the issue of United States Notes, and for the Redemption or Funding thereof, and for Funding the Floating Debt of the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury is hereby authorized to issue, on the credit of the United States, one hundred and fifty millions of dollars of United States notes, not bearing interest, payable to bearer at the Treasury of the United States and of such denominations as he may deem expedient, not less than five dollars each; that fifty millions of said notes shall be in lieu of the Demand Treasury notes authorized to be issued by the act of July 17, 1861; which said demand notes shall be taken up as rapidly as practicable, and the notes herein provided for substituted for them; that the amount of the two kinds of notes together shall at no time exceed the sum of one hundred and fifty millions of dollars, and such notes herein authorized shall be receivable in payment of all taxes, internal duties, excises, debts and demands of every kind due to the United States except duties on imports (and for all salaries, debts and demands, owing by the United States to individuals, corporations and associations within the United States), and of all claims and demands against the United States of every kind whatsoever, except for interest upon bonds and notes, which shall be paid in coin, and shall also be lawful money and a legal tender in payment of all debts, public and private, within the United States, except interest and duties on imports as aforesaid. And any holders of said United States notes deposit any sum not less than \$50 or some multiple of fifty dollars, with the Treasurer of the United States, or either of the Assistant Treasurers, shall receive in exchange therefor duplicate certificates of deposit, one of which may be transmitted to the Secretary of the Treasury, who shall thereupon issue to the holder an equal amount of bonds of the United States, coupon or registered, as may by said holder be desired, bearing interest at the rate of six per centum per annum, payable semi-annually at the treasury or sub-treasuries of the United States, and redeemable at the pleasure of the United States after five years, payable twenty years from the date thereof. And such United States notes shall be received the same as coin, at their par value, in payment for any loans that may be hereafter sold or negotiated by the Secretary of the Treasury, and may be re-issued from time to time as the exigencies of the public interest shall require. [There shall be printed on the back of the United States notes which may be issued under the provisions of this act the following words: "The within note is a legal tender in payment of all debts, public and private, and is exchangeable for bonds of the United States bearing six per centum interest, at twenty years, or in seven per centum bonds at five years."]

Section 2. *And be it further enacted,* That to enable the Secretary of the Treasury to fund the Treasury notes and floating debt of the United States, he is hereby authorized to issue, on the credit of the United States, coupon bonds, or registered bonds, to an amount not exceeding five hundred millions of dollars, [and] redeemable at the pleasure of

the United States after five years, and payable at twenty years from date, and bearing interest at the rate of six per centum per annum, payable semi-annually. And the bonds herein authorized shall be of such denominations, not less than fifty dollars, as may be determined upon by the Secretary of the Treasury. And the Secretary of the Treasury may dispose of such bonds at any time, at the market value thereof, for the coin of the United States, or for any of the Treasury notes that have been, or may hereafter be, issued under any former act of Congress or for United States notes that may be issued under the provisions of this act, and all stocks, bonds and other securities of the United States held by individuals, corporations, or associations within the United States shall be exempt from taxation by or under State authority.

Section 3. *And be it further enacted,* That the United States notes, and the coupon or registered bonds authorized by this act, shall be in such form as the Secretary of the Treasury may direct, and shall bear the written or engraved signatures of the Treasurer of the United States and the Register of the Treasury, and also, as evidence of lawful issue the imprint of a copy of the seal of the Treasury Department, which imprint shall be under the direction of the Secretary, after the said notes or bonds shall be received from the engravers, and before they are issued; or the said notes and bonds shall be signed by the Treasurer of the United States, or for the Treasurer, by such persons as may be specially appointed by the Secretary of the Treasury for that purpose, and shall be countersigned by the Register of the Treasury, or for the Register by such persons as the Secretary of the Treasury may specially appoint for that purpose; and all the provisions of the act entitled "An act to authorize the issue of Treasury notes," approved the twenty third day of December, eighteen hundred and fifty seven, so far as they can be applied to this act, and not inconsistent therewith, are hereby revived and re-enacted, and the sum of three hundred thousand dollars is hereby appropriated, out of any money in the Treasury not otherwise appropriated, to enable the Secretary of the Treasury to carry this act into effect.

Section 4. *And be it further enacted,* That the Secretary of the Treasury may receive from any person or persons, or any corporation, United States notes on deposit for not less than thirty days, in sums of not less than one hundred dollars, with any of the Assistant Treasurers or designated depositories of the United States authorized by the Secretary of the Treasury to receive them, who shall issue therefor certificates of deposit, made in such form as the Secretary of the Treasury shall prescribe, and said certificates of deposit shall bear interest at the rate of five per centum per annum; and any amount of United States notes so deposited may be withdrawn from deposit any time after ten days notice on the return of said certificates. Provided, that the interest on all such deposits shall cease and determine at the pleasure of the Secretary of the Treasury; and provided, further, that the aggregate of such deposits shall at no time exceed the amount of twenty-five million dollars.

Section 5. *And be it further enacted,* That all duties on imported goods shall be paid in coin, or in notes payable, or in demand notes heretofore authorized to be received, and by law receivable in payment of public dues, and the same so paid shall be set apart as a special fund, and, applied as follows

First—To the payment in coin of the interest on the bonds and notes of the United States.

Second—To the purchase or payment of one per centum of the entire debt of the United States, to be made within each fiscal year after the first day of July, 1862, which is to be set apart as a sinking fund, and the interest of which shall, in like manner, be applied to the purchase or payment of the public debt, as the Secretary of the Treasury shall, from time to time, direct.

Third—The residue thereof to be paid into the Treasury of the United States.

Section 6. *And be it further enacted,* That if any person or persons shall falsely make, forge, counterfeit, or alter, or cause or procure to be falsely made, forged, counterfeited, or altered, or shall willingly aid or assist in falsely making, forging, counterfeiting, or altering, any note, bond, coupon, or other security issued under the authority of this act or heretofore issued under acts to authorize the issue of Treasury notes or bonds; or shall pass, utter, publish, or sell, or shall attempt to pass, utter, publish, or sell, or bring into the United States from any foreign place, with intent to pass, utter, publish, or sell, or shall have or keep in possession or conceal with intent to utter, publish, or sell, any such false, forged, counterfeited, or altered note, bond, coupon, or other security, with intent to defraud any body corporate or politic, or any other person or persons whatsoever, every person offending shall be deemed guilty of felony, and shall, on conviction thereof, be punished by fine not exceeding five thousand dollars, and by imprisonment and confinement to hard labor not exceeding fifteen years, according to the aggravation of the offense.

Section 7. *And be it further enacted,* That if any person, having the custody of any plate or plates from which any notes, bonds, coupons, or other securities mentioned in this act, or any part thereof, shall have been printed, or which shall have been prepared for the purpose of printing any such notes, bonds, coupons, or other securities, or any part thereof, shall use such plate or plates, or knowingly permit the same to be used for the purpose of printing any notes, bonds, coupons or other securities or any part thereof, except such as shall be printed for the use of the United States by order of the proper officer thereof; or if any person shall engrave, or cause or procure to be engraved, or shall aid in engraving any plate or plates in the likeness or similitude of any plate or plates designed for the printing of any such notes, bonds, coupons or other securities, or any part thereof, or shall vend or sell any such plate or plates, or shall bring into the United States from any foreign place any such plate or plates, with any other intent or for any other purpose in either case than that such plate or plates shall be used for printing of such notes, bonds, coupons, or other securities, or some part or parts thereof for the use of the United States, or shall have in his custody or possession any metallic plate engraved after the similitude of any plate from which any such notes, bonds, coupons, or other securities or any part or parts thereof, shall have been printed with intent to use such plate or plates, or cause or suffer the same to be used in forging or counterfeiting any such notes, bonds, coupons, or other securities or any part or parts thereof issued as aforesaid or shall have in his custody or possession any blank note or notes, bond or bonds, coupon or coupons, or other security or securities engraved or printed after the similitude of any

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	48		\$	\$										
Baltimore and Ohio.....	Md.	380		13,111,800	10,781,833	566,070	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling.	3,000,000	5			
do do										Mortgage.....	2,500,000	6		1885	
do do										"	700,000	6		1880	
do do										"	1,125,500	6		1875	
do Washington Branch.....	Md.	30		1,650,000						"	1,000,000	6		1887	
Bellefontaine and Indiana.....	Ohio & Ind.	118		1,859,813	1,256,750	139,129	314,000	8,795	Dec. 1860.	1st Mortgage.....	791,000	7		1866	
do do										2d ".....	100,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	121	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	96		3,798,400	8,820,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	450,000	6		1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	800,000	7		1864	
do do										2d ".....	80,000	7		1863	
do do										3d ".....	950,000	7		1865	
do do										4th " S. F.	1,265,000	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7		1865 & 1870	
do do										2d ".....	600,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,600,000	7			
do do										2d ".....	1,535,000	7			
do do										3d ".....	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d ".....	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	104		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F.	1,250,000	7	41	Feb. & Aug. 1	
do do										Gen'l 1st Mortgage.	3,600,000	7	41	Feb. & Aug. 1	
do do										2d ".....	2,000,000	6	11	May 1	
Chicago and Rock Island.....	Ills.	56 1/2	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7		1870	
Chicago, Burlington and Quincy.....	"	61 1/2	138	4,689,340	4,814,515		1,314,428	761,830		Cons. 1st Mort. S. F.	2,175,000	8	99	1863	
do do										" 2d " S. F.	713,000	8		1890	
do do										1st Mor. Chi. & Aur.	399,000	7		1867	
do do										2d ".....	303,000	7		1869	
do do										1st "Cent. Mil. Tract	392,000	7		1864	
do do										2d ".....	245,000	8		1868	
Chicago, Iowa and Nebraska.....	Ind.	82		No report											
Cincinnati and Chicago Air Line.....	Ind.														
Cincinnati, Hamilton and Dayton.....	Ohio.	60		2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000			1867	
do do										2d ".....	950,000			1860	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,301,000				
do do										2d ".....	532,000				
do do										3d ".....	104,000				
Cleveland and Mahoning	Ohio.	68 1/2		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,500				
do do										1st Mortgage.....	850,000	7			
do do										2d ".....	490,000	7			
do do										3d ".....	344,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	18 1/2	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	0	13 1/2	1860	
do do										2d " M. L. or 1st Ex.	1,188,000			1873	
do do										3d 2d Ex.....	1,165,000			1865	
do do										4th 3d Ex.....	1,154,000				
Cleveland and Toledo.....	Ohio.	45 1/2	148	3,343,800	3,850,670	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jan. 1st Div.	359,000			1867	
do do										1st " " 2d Div.	263,000			1872	
do do										2d ".....	265,000			1862	
do do										1st " Tol. Nor. & Cleve	521,000			1863	
do do										2d ".....	293,300			1863	
do do										Junction Income..	44,500			1862	
do do										C. & T. Income.....	300,000			1864	
Cleveland, Columbus and Cincinnati..	Ohio.	109	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000			1864 & 1890	
Cleveland, Painesville and Ashtabula..	"		98 1/2	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000			1861	
do do										2d ".....	303,000			1862	
Columbus and Xenia.....	Ohio.	54 1/2		1,490,000	290,700	50,500				Dividend.....	272,700			1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666	2,512,000					2d ".....	2,212,000	8			
Dayton and Western.....	Ohio.	98		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000				
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000	7		1875	
do do										2d ".....	1,000,900	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328								
Evansville and Crawfordsville.....	Ind.	132		986,061	1,219,100	249,868	124,140	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.											
Galena and Chicago Union.....	Ills.	69 1/2	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	400,000				
do do										2d ".....	184,000				
Great Western	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage.....	1,993,000		100	1862 & 1863	
do do										2d ".....	1,320,000		99	May 1, 1873	
Green Bay, Milwaukee and Chicago...	Wis.	54		400,000	No report					1st Mortgage W. D.	1,041,000	10			
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573		E. D.	1,350,000	7			
Hannibal and St. Joseph.....	Mo.	206		1,041,986	10,554,000	220,336	996,907	512,933	Sept. 1, 1860.	Land Mortgage...	5,000,000		67 1/2		
do do										Mortgage Conv.....	1,354,000		30		
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	354,136			1st Mortgage.....	4,000,000	6		1873	
Hudson River.....	N. Y.	37	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Aug. 31, 1861	1st Mortgage.....	2,000,000		102	1869 & 1870	
do do										2d ".....	2,000,000			1860	
do do										3d ".....	1,840,000			1875	
Illinois Central.....	Ills.	66 1/2	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000		86	1868	
do do										Construction.....	12,883,000		77	1875	
do do										".....	4,115,000		93	1875	
do do										".....	42,740				
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	Debentures.....	600,000				
do do										1st Mortgage.....	578,000				
do do										2d ".....	38,700	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,852	230,834		Income.....	500,000			1866	
do do										1st Mortgage.....	400,000				
do do										2d ".....	200,000				
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort...	649,984				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			1st Mortgage.....	314,000				
Iowa.....	Ohio.	13		118,865	50,000		No report			2d ".....					

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st	2,900,000	7		1861	
do										2d	392,000	7		1873	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st	290,000	7			
do										2d " Conv.	1,000,000	7			
do										3d "	600,000	7			
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	900,000				
do										2d " E. D.	1,000,000		12		
do										1st Land Grant W D	4,000,000				
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report		June 30, 1861	1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.	29		514,433	130,000		108,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883	
Little Miami.....	Ohio.	65					1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000				
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		245,910	98,679	June 30, 1861	1st Mortgage.....	248,000				
do										1st Mortgage.....	2,000,000	7			
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.	208		8,561,313	190,488	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868	
do										2d "	2,000,000	7			
do										3d "	1,500,000	7			
do										Sterling Income..	333,000	4			
do										Domestic	928,617				
Michigan Central.....	Mich.	57	284	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	1st Mortgage Sterling	467,489	6		1872	
do										1st " Conv.	500,000	8	100	1869	
do										1st " unconv.	250,000	8		1860	
do										1st " Dollar Conv.	2,500,000	8		1869	
do										1st " S. F. Conv.	4,153,000	8	93	1882	
Michigan South'n & North'n Indiana	Mich &	24½	346	9,018,300	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. So....	991,000	90		1860	
do										" Nor. Ind....	985,000	88½		1861	
do										" Goshen Line.	1,168,000	85		1868	
do										S. F. Toledo	2,850,000	85		1885	
do										2d Mortgage	2,465,000	73		1877	
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8			
do										2d "	200,000	7			
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8			
do										2d "	600,000	8			
Milwaukee and Prairie du Chien.....	Wis.	26½	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7		1891	
Milwaukee and Western.....	Wis.	71		No report											
Mississippi and Missouri.....	Iowa,	35		No report											
do										1st Mortgage Conv.	1,000,000	7			
do										2d " S. F.	400,000	8			
New Jersey.....	N. J.	33	34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Oskaloosa Div....	1,425,000	7			
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	Land Grant.....	7,000,000	7			
New York and Erie Pref.....	N. Y.	62½		Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860	Mortgage.....	711,000				
do		37½								1st Mortgage.....	3,000,000		106		
do										2d "	4,000,000				
do										3d "	6,000,000		96		
do										4th "	4,900,000		80½		
do										5th "	1,792,500		76		
New York and Harlem Pref.....	Conn.	30	138	5,717,190	6,055,752	.....	1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7		1873	
do										2d "	1,000,000	7		1864	
New York and New Haven.....	Conn.	13½		3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	6		Dec. 1, 1866	
do										"	978,000	6		Oct. 1, 1875	
New York Central.....	N. Y.	83½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.	7,925,000	6	98	May 1, 1883	
do										Mortgage.....	3,000,000	7	104½	June 15, 1864	
Northern Central.....	Md.	138		2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,066,500	6		1885	
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000				
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6			
do										3d "	316,905				
do										Construction.....	4,637,920				
do										Income.....	3,591,185				
Ohio and Mississippi, Western Div....	Ills.	148		.....	3,292,403		No report			State Loan.....	7,000,000	6	38-		
Pacific.....	Mo.			3,199,662	7,009,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W....	2,800,000	6			
do										Construction.....	4,500,000	6			
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,900,000	6		1888	
do										2d "	2,319,000	6		1875	
do										2d " Sterling.	1,957,440	6		1875	
do										State Works.....	7,200,000	5			
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report								
Philadelphia, Wm. & Baltimore.....	Del.	98		5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6		1884	
do										Improvement.....	119,000	6		1863	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	1st Mort. O. & P.	1,000,000	7		1865	
do										2d "	750,000	7		1866	
do										1st " O. & I....	1,000,000	7		1872	
do										2d "	380,000	7		1873	
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000				
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.						
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1866	
do										"	997,000	7		1866	
do										"	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886	
Seoto and Hooking Valley.....	Ohio.	56		403,975	500,000	100,000	110,200	53,100							
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000				
do										2d "	450,000				
Staubenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d "	900,000	7		1865	
do										1st Mortgage Conv.	1,000,000	7	75	1862	
do										2d "	2,000,000	7		1868 & 1870	
do										1st " Bel. & Ill.	517,000	7		1873	
Terre Haute and Richmond.....	Ind.	100	73	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	75½	1866	
do										1st Mortgage.....	3,400,000	7		Aug. 1, 1865	
Toledo, Wabash and Western.....	Ohio & Ind	54	243	2,123,500	5,996,049	52,369	233,545			2d "	2,500,000	7	45	Nov. 1, 1878	
do										Mort. Coupons....	96,040	7		1880 to 1885	

notes, bonds coupons, or other securities or any part or parts thereof issued as aforesaid notes, bonds, coupons, or other securities, issued as aforesaid, with intent to sell or otherwise use the same; or if any person shall print, photograph, or in any other manner execute or cause to be printed, photographed, or in any manner executed, or shall aid in printing, photographing, or executing any engraving, photograph, or other print, or impression, in the likeness or similitude of any such notes, bonds, coupons, or other securities, or any part or parts thereof, except for the use of the United States and by order of the proper officer thereof, or shall vend or sell any such engraving, photograph, print, or other impression, except to the United States, or shall bring into the United States from any foreign place any such engraving, photograph, print, or other impression for the purpose of vending or selling the same, except by the direction of some proper officer of the United States, or shall have in his custody or possession any paper adapted to the making of such notes, bonds, coupons, or other securities, and similar to the paper upon which any such notes, bonds, coupons, or other securities shall have been issued, with intent to use such paper, or cause or suffer the same to be used in forging or counterfeiting any of the notes, bonds, coupons, or other securities issued as aforesaid, every such person so offending shall be deemed guilty of a felony, and shall, on conviction thereof, be punished by fine not exceeding five thousand dollars, and by imprisonment and confinement to hard labor not exceeding fifteen years according to the aggravation of the offense.

DECISION OF U. S. SUPREME COURT ON THE PASSAIC AND HUDSON RIVER BRIDGE CASES.

By communications received from Washington, we are enabled to state more particularly the result of these cases, and the position in which they leave the important questions involved in them.

The decision of the court was announced Monday, the 27th inst. There were three cases from New Jersey: Charles E. Milnor *vs.* The New Jersey Railroad Company; David Bigelow *vs.* The same; and Charles E. Milnor *vs.* The Newark and Jersey City Plank Road Company. There were also two cases from New York, relating to the proposed railway bridge at Albany; Robert D. Stillman *vs.* The Hudson River Bridge Company, and F. W. Coleman *vs.* The same.

Our readers will remember that the points involved in the New Jersey cases were:

1st. Whether the United States Court would interfere to prevent the New Jersey Railroad Company from constructing a bridge across the Passaic river, at the foot of Market street, Newark, by reason of any obstruction to navigation which such bridge would cause.

2d. Whether the New Jersey Railroad Company were bound by any private contract which would be impaired by the construction of said bridge.

3d. Whether any one stockholder of the Passaic and Hackensack Bridge Company, which claims a monopoly of bridging those rivers, could prevent the erection of such bridge, notwithstanding a vote of the directors, assenting to its erection.

A similar case in all respects, except the question of private contract, was presented in relation to the Newark and Jersey City Plank Road and Ferry Company, over the Passaic river.

The first question, namely, that relating to the obstruction of navigation was of the greatest public importance, and received the greatest share of attention, both from the counsel who argued the cases and from the court. Mr. Justice Grier, when the cases came before him, in 1858, held that, on such a river as the Passaic, which rises and runs its entire course in a single State, the Legislature of that State has a perfect right to erect or authorize the erection of such bridges as it sees fit; and that nothing in the Constitution gives to the United States Courts any power to interfere with the State action. On the other points presented, Judge Grier decided in favor of the Railroad Company, and dismissed the bill. From this decision the complainants appealed to the Supreme Court of the United States. On Monday last, it was announced that the Court were equally divided, and hence Judge Grier's decision stood affirmed. Eight judges heard the argument of the causes last winter; two of whom have since ceased to act—Justice McLean, who has deceased, and Justice Campbell, who resigned. But it is understood that their presence would not have altered the result—as they were well known to have entertained opposite views on the main question. Justice McLean adhering to his views as expressed in the Wheeling Bridge case, and Justice Campbell being opposite to the interference of the Courts.

The Albany case is differently situated. In that case, Justice Nelson and his colleague in the Northern Circuit of New York, Judge Hall, differed in opinion; the former being in favor of interference and an injunction against the construction of the bridge, the latter opposed. The case was therefore certified to the Supreme Court for advisement. The Supreme Court being divided, no advice can be given, and therefore the bill for injunction will be dismissed in that case also.

Consequently, in both cases, all legal obstacles to the construction of the bridges is removed.

It can not be concealed that these cases are of the highest importance. The counsel for the New Jersey Railroad and Plank Road Companies, Messrs. Bradley and Zabriskie, of this State (New Jersey) contended that in all matters pertaining to the changes made by the machinery of civilization on the physical face of the country, the State Legislatures are supreme, except when the general government, in the exercise of the war power, or some other express constitutional provision, is authorized to take physical possession of the soil and waters of the country, without respect to locality. Within this category come the ten miles square which Congress is authorized to acquire for the location of a seat of Government; and also locations for forts, arsenals, docks, navy-yards, light-houses, post-offices, etc.; and in times of war, all and any lands or waters necessary to be occupied for the common defence and general welfare. Outside of these special and exceptional cases, it was contended, that the General Government, under the power to regulate commerce, could only regulate those things of which commerce consists, which are the transactions, dealings and intercourse of men in society; in short, actions, as distinguished from things. This was the general drift of the argument.

Mr. Pruyn, of New York, who appeared on behalf of the New York Central Railroad Company, followed in the same line of argument; and also adverted to the history of the origin of the Constitution, in illustration of these views. Mr. Seward confined himself to the one point, that the question whether a bridge of the particular locality proposed, was or was not ad-

missible, was a question of legislative discretion, and not of judicial cognizance. On the other side, Messrs. Harding, of Philadelphia; Parker, of New Jersey; Beach, of Troy; and Reverdy Johnson, contended for the supervisory power of the United States Courts in such cases, as laid down in the Wheeling bridge case.

The cases were several days under discussion in December 1860, and were held over for deliberation to the present term. The decision now made, on account of the decision of the Court, does that settle the law; but it has greatly unsettled some of positions taken by Justice McLean (who read the opinion of the Court) in the Wheeling bridge case; and does so on grounds that render it extremely doubtful whether the Court can ever get back to those positions.

The counsel of the Railroad Companies strenuously contended that the decision in the Wheeling bridge case would not be affected or shaken by any positions assumed by them; for in that case, the river in question (the Ohio) was an inter-state (or international) river, on which several States had mutual right of navigation, and that on principles of international law, as well as from several compacts between the States, Virginia had no right to erect a bridge at Wheeling which would injure the commerce of Pennsylvania at Pittsburgh; and that any invasion of Pennsylvania's rights was a very proper subject for adjudication in the United States Courts. Hence it was contended that, the decision in the Wheeling bridge case was no precedent in favor of the Courts assuming to control the action of the State Legislature in relation to such a river as the Passaic. Some of the positions assumed by Justice McLean in that case, it is true, would lead to such an assumption of jurisdiction. But these positions, it was contended, were unnecessary to the decision of the case.

As the course of argument, followed by the counsel in favor of the bridges, was substantially that taken by Justice Grier, whose decision is now affirmed, the present position of the question would seem to be this: On one side it is contended, that in the case of all navigable waters, whether lying wholly within one State, or crossing or bordering on several States, the United States Court may and ought to control any individual or State action which would obstruct or materially interfere with the public navigation thereof, and especially so if such obstruction or interference would affect the approach to a port of entry of the United States. On the other side it is contended, that, leaving to Congress the full and exclusive power to regulate commerce, the physical regulation and supervision of the streams, highways, soil and waters, and surface of the country generally, of every State belongs to the Legislature of that State exclusively; and can not be interfered with by Court or Congress under the commercial power. And on these two distinct and opposite views the Supreme Court, as at present constituted, are equally divided.

An intermediate ground is assumed by some, namely, that Congress, by direct action, may assume the regulation of navigable streams to the exclusion of the authorities; but that until Congress has so done, the Courts can not interfere; for, to Congress, not to the Judiciary, is given the power to regulate commerce. And for this position they refer to the practice of the Government, of expending large sums for the improvement of rivers and harbors. Those who contend for State jurisdiction allege that the power to erect improvements is

conceded and acquiesced to, and even sought by the States, as a favor to themselves, and therefore differs widely from an exercise of power inimical to state jurisdiction; but that, strictly speaking, such power could only be claimed by Congress as a *matter of right* in rivers or waters that have an international character, *i. e.*, rivers, lakes, or seas that flow along or through two or more States.

The subject, it is seen, leads to a consideration of some of the gravest constitutional questions; and it is not strange, therefore, that the Court should have attached special importance to these cases. It is to be regretted, that, on a question of such great consequence, something like unanimity of opinion could not have been attained. One thing is quite evident, namely. If the United States Courts should assume the power to revise all State legislation in regard to the bridging and regulation of domestic navigable streams, they would never lack for a good share of business on their dockets, nor for the litigation of exciting popular questions.—*Newark Daily Advertiser.*

PANAMA RAIL ROAD COMPANY.

Statement for the year ending December 31st, 1861.

Balance to credit "income account," after dividend, January 2, 1861, per statement ..	\$650,809 20
Add excess of receipts over estimate for part of December	35,615 31
	\$686,424 51
Less amount carried to credit "undivided earnings" account	620,809 20
	35,615 31

Receipts from December 31st, 1860, to December 31st, 1861:

Receipts for passengers	\$694,414 36
Receipts for freight, merchandise	530,996 32
Receipts for freight treasure	134,144 26
Receipts for mails	11,515 47
Receipts for interest, wharfage, light money, &c.	23,789 28
Receipts for earnings for a portion of December, estimated	45,000 00
	\$1,639,839 69

Deduct interest on sterling bonds, £540,000 with exchange and commission	\$180,951 08
Deduct interest on convertible bonds	1,505 00
Working expenses, including materials, repairs, subsistence, labor and salaries, &c.	696,192 14
Office expenses	23,014 29
New Granadian Government's proportion of mail receipts	10,000 00
	\$611,663 11

Net earnings for the year	\$963,811 89
Dividend No. 18, paid July 2d, on \$4,976,000 6 per cent.	\$298,560 00
Dividend No. 19, payable Jan. 2d, on \$4,981,000, 6 per cent.	298,860 00
New Granadian Government's proportion 3 per cent.	17,922 60
Paid Trustees sinking fund, July 1861	\$50,000
Appropriated to sinking fund, December, 1861	50,000—
	100,000 00
	\$715,342 60

Surplus after dividends of 1861, to credit undivided earnings	\$248,469 29
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GENERAL STATEMENT.

<i>Dr.</i>	
Construction account	8,000,000 00
Cash in bank	250,966 77
Loans on demand	261,942 10
Cavan, Lubbock, & Co., London	102,774 14
Investment in U. S. 7.30 per cent. treasury notes	100,580 00
Investment in company's sterling bonds, 1865	34,369 15
North Atlantic Steamship Company, representing five months Steamers Baltic and Atlantic	277,777 74
Sinking fund, invested	150,369 86
Amounts due from agents and others	72,981 08

Steamer Guatemala, valued	115,000 00
New steamer Salvador, payments on account	80,580 54
Steamer Columbus, valued	20,000 00
Interest in sailing vessels, valued	24,000 00
Steam tug and launches in Bay of Panama, valued	35,000 00
Real estate, on the Isthmus and Islands in the Bay of Panama, cost	68,446 99
Coal account, amount on hand	8,742 02
	\$9,603,530 43

Cr.

Capital stock	\$4,981,000 00
Convertible bonds, still out	19,000 00—\$5,000,000 00
Sterling bonds, amount originally issued for construction	3,000,000 00
Less amount matured in 1859, paid and held by the company	600,000 00
	2,400,000 00
Exchange	66,237 78—2,466,237 78
Book accounts	60,054 40
Dividend declared, payable Jan. 2d, 1862, with New Granadian Government proportion	307,825 20
Appropriation to Sinking fund Dec. 24, 1861	50,000 00
Bonds redeemed and held by the Company, as above	600,000 00
Undivided earnings from road, Undivided earnings from sailing vessels, steamers, tugs, launches, &c.	\$899,278 49
	220,133 96—\$1,119,412 45
	\$9,603,530 43

MONETARY AND COMMERCIAL.

The market for money is as heretofore reported easy for first class paper at 8 to 10 per cent. With not sufficient quantity offering to absorb the capital usually employed. Hence the difficulty in making satisfactory negotiations at the higher rates. Second class paper is difficult to place at any price.

The Treasury Note Bill having gone into effect, we have a uniform currency all over the country, exchange can therefore be no higher than the cost of transporting the currency. This to Western people who have paid from 1 to 10 per cent premium for it is a very satisfactory state of things. It now remains to be seen how long we can guard against the unprincipled scoundrels who have hitherto fattened on counterfeiting the issues of the banks.

Exchange has been easy during the week at par buying to 1/8 premium. An attempt was made to increase the rate to 1/4 premium selling. But it was not sustained and it is hardly probable that it can be unless treasury notes are put at a premium. Gold is dull and rates declined. Quotations are as follows:

	Buying.	Selling.
New York, sight	Par.	1/8 prem.
Philadelphia, "	"	1/8 prem.
Boston, "	"	1/8 prem.
Gold	1/2 prem.	1 1/2 prem.

General business has been fair, and it is quite likely that the trade of the country north of the Ohio will prove quite as large as usual, while it remains yet to be seen what will be the result in the States South of Kentucky. The absolute want of money must seriously distress the people of those States, and it will be impossible to deal with them on any other basis than cash. Their bank notes and Con-

federate States Scrip are utterly worthless, and the fact that United States Treasury Notes are quoted as the index of par value in Richmond while the Confederate States Scrip is at a very heavy discount, would seem to indicate their own lack of confidence in their circulating medium. If they act wisely and send their crops to market as soon as an avenue is opened to them, they will then have the means of purchasing the necessities of life. If they do not, there must be much suffering. No permissions have yet been given to trade down to the Union lines.

Flour is in moderate demand for home use. We quote superfine at \$4.25 to \$4.30; extra at \$4.40 to \$4.45; family at \$4.50. Corn has advanced to 36 cts; Whisky 19 and 20 cents. Mess Pork is quoted at \$10.75 to \$11.00, Sides 3 1/2 to 4 1/2 cts., Hams 4 and Shoulders 3 1-16 cts. for green meats. Bacon 3 1/2 for Shoulders, 5 1/2 for sides and 6 1/2 for clear sides. Sugar cured Ham canvassed 7 to 7 1/2 cts., uncanvassed 6 to 7 cents.

Advices from the east indicate a very encouraging state of affairs. Confidence is greatly strengthened and government securities are looked upon with favor. Stocks generally are steady and prices sustained. The large increase in the earnings of various leading railroads added to the increased confidence in the government tends to strengthen the market. Rates for money are quoted at 6 to 7 per cent. Gold is quoted at 1 1/8 to 1 1/2 premium.

STOCKS—Active and higher; Chicago and Rock Island 55 1/2; Milwaukee and Prairie du Chien 26 1/2; do do 2d preferred, 58, Cleveland and Toledo, 45 1/2 Galena and Chicago 69 1/2; Cleveland and Pittsburgh, 18 1/2; Michigan Central, 57; Illinois Central Scrip. 66 1/2; Erie, 37 1/2; do preferred 62 1/2; New York Central 83 1/2; Pacific Mail 96 1/2; Cumberland 8 1/2; American Gold, 101 1/2, at 60; Hannibal and St. Joseph, 44 1/2; Hudson, Third Bonds, 82; Missouri Sixes, 53 1/2; Virginia Sixes, 60; Tennessee sixes, 60; Treasury 7 3-10, 100; Small United States Sixes of '67, 94 1/2; United States Sixes of '81, coupons, 94. The money market continues easy, at 6@7 per cent; for loans on call, and at the same figures for strictly prime paper. Sterling Exchange firmer, with a moderate business, at 111@111 1/2 for merchant's and 112@112 1/2 for Banker's Bills. American gold steady at 1 1/8@1 1/2 per cent. premium. California Gold Bars steady at 1 1/2 @1 1/2 per cent. premium, Government Stocks firm; United States Sixes of 1881, 93 1/2@94; 7 3-10ths Treasury Notes firm at par.

The earnings of the Erie Railway for the month of

February, 1862, were	\$603 029 67
Earnings February, 1861	391,932 27
Increase	\$211,097 40

The following is a statement of the earnings of this Road for the first five months of the present fiscal year:

Months.	1861-2.	1860-1.	Increase.
October	\$722,762 05	\$385,597 59	136,764 46
November	734,326 10	554,532 25	180,293 85
December	703,136 29	404,276 30	303,859 99
January	695,606 98	404,507 55	291,099 43
February	603,029 67	391,932 27	211,097 40
Total	\$3,463,961 09	\$2,340,846 96	\$1,123,115 15

SANDUSKY, DAYTON AND CINCINNATI R. R.—
We understand that this road has been leased
for a term of years to the Little Miami R. R.
of this city.

NEW JERSEY RAILROAD & TRANSPORTATION COMPANY.

ANNUAL REPORT.

We are indebted to the officers for the following abstract of the Annual Report of the New Jersey Railroad and Transportation Company, to the Legislature of New Jersey, for the year 1861:

Capital Stock.....	\$4,397,800 00
Funded debt (including \$495,000, the cost of the property and privileges purchased by the Jersey Associates).....	688,000 00
Profit and loss, being surplus earnings represented by the improvements, property and cash stated below.....	\$349,084 55
Less amount paid for relaying road with new rails and other improvements.....	26,826 17
	\$323,258 38
Dividend 1st January, payable 1st February, 1862.....	219,872 50
	543,130 88
	\$5,628,930 88

COST OF ROAD AND EQUIPMENTS.

For graduation and masonry, bridges, superstructure, iron, passenger and freight stations, buildings and fixtures, engine and car houses, work shops, machinery and fixtures, engineering, land and land damages.....	\$3,609,069 19.
Locomotives, tenders and snow plows.....	165,175 09
Cars—Passenger, freight and baggage.....	235,203 36

PROPERTY, VIZ.

Bridge, ferry, turnpike and other stocks, real estate, ferry boats, privileges and fixtures (including the property and privileges purchased of the Jersey Associates for \$485,000).....	\$1,249,621 07
Cash in bank and cash items receivable on demand.....	369,842 17
	\$1,619,463 24
	\$5,628,930 88

Receipts and expenses for the year.

RECEIPTS.

From passengers.....	\$714,305 75
From freight.....	81,097 31
From U. S. mail, rents, express, freight and other sources.....	197,364 28
	\$992,767 34

EXPENSES.

Maintaining railroad, bridges and buildings...	\$64,819 10
Repairs of Locomotives, cars and machinery...	42,412 49
Fuel—cost and labor in preparing.....	70,400 85
Operating the road and transporting passengers and freight.....	212,892 78
Office expenses, salaries and contingencies....	12,268 01
	\$412,786 23
	\$579,981 11
Interest on bonds.....	\$41,020 00
Transit duty on passengers and freight.....	16,669 14
Tax on capital Stock.....	21,489 25
Dividends in cash, August and February.....	60,802 72
	\$579,981 11

Operations of the Company during the year. The number of passengers and tons of goods, wares and merchandise transported.

PASSENGERS.

Passing over the whole line of the road.....	341,860
Passing between Jersey City and Newark.....	1,167,615
Passing between Jersey City and Elizabeth.....	211,101
Passing between Jersey City and Rahway.....	65,565
Passing between Jersey City and Uniontown and Metuchen.....	8,387
Passing between Jersey City and New Bruns-	

wick.....	75,702
Passing between Jersey City and all intermediate places.....	452,367
Total, (not including commuters and free passengers).....	2,322,598

GOODS, WARES AND MERCHANDISE.

	Tons.
Passing over the whole line of the road.....	1,606
Passing between Jersey City and Newark.....	41,419
Passing between Jersey City and Elizabeth.....	3,038
Passing between Jersey City and Rahway.....	3,495
Passing between Jersey City and New Brunswick.....	8,529
Passing between Jersey City and all intermediate places.....	41,542
Total.....	99,550
Number of miles run by passenger, freight and other trains.....	487,894

ERIE RAILWAY.

Great Broad Gauge, Double Track and Telegraph Route

TO

NEW YORK, BOSTON,

AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; or JOHN S. DONLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

feb. 6.

CHARLES MINOT, Gen'l Sup't.

N. W. BALDWIN,

MATHEW BAIRD.

M. W. BALDWIN & CO.

ENGINEER'S

BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

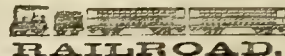
LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order: Wheels Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

419 y

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANA POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M. Chicago at 6:00 A. M., connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.

W. H. L. NOBLE,

General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums by Franklin Institute.)

OHIO & MISSISSIPPI

RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENT, Cairo, and St. Louis.

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.

RETURNING.—Mail Train Leaves East St. Louis, (Sundays excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M., arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office No. 5 East Third street; No. 1 Burnet House, corner of north-west corner of Front and Broadway; Spencer House Office; and at the Depot corner of Front and Mill Streets.

G. B. MCLELLAN, Gen'l Superintendent

Omni-buses call for Passengers, Novemb 11th, 1861.

1861. 1861
FAST TIME.
LITTLE MIAMI
AND
COLUMBUS AND XENIA
AND
CINCINNATI, HAMILTON & DAYTON
RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Eaton, Richmond, Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express.—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation.—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation.—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Richmond, Indianapolis and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation.—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express.—From Cincinnati, Hamilton and Dayton Depot.—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,
General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

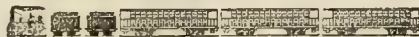
T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet Walnut & Vine
CINCINNATI O

W. MORRILL. G. B. BOWERS
MORRILL & BOWERS,
(Successors to and members of the late firm of
C. WASON & CO.)
CLEVELAND, OHIO,

Are prepared to execute all orders or
Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.
Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.
Orders respectfully solicited, with the assurance that pains will be spared to give entire satisfaction in all cases.

1862. 1862.
Pennsylvania Central R.R.
285 MILES DOUBLE TRACK.



(With its Connections)
IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
ONE TRAIN RUNS DAILY (430 MILES.)
VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.
ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
D. A. STEWART, Freight Agent, Pittsburgh.
CLARKE & CO., Transfer Agents, Pittsburgh.
R. C. MELDRUM & CO., Madison, Indiana.
J. E. MOORE, Louisville, Ky.
W. W. AIKMAN & CO., Evansville, Ind.
R. F. SASS, St. Louis, Missouri.
CLARKE & CO., Chicago, Illinois.
W. H. & E. L. LANGLEY, Gallipolis, Ohio.
G. B. NEAL, Parkersburg, Virginia.
HALL & CO., Marietta, Ohio.
H. S. PIERCE & CO., Zanesville, Ohio.
McDOWELL & McCORM, Portsmouth, Ohio.
R. McNEELY, Maysville, Ky.
J. P. JOHNSTON, Ripley, Ohio.
JOHN TODD, Covington, Ky.
G. L. HEATON, Cleveland, Ohio.
R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
L. L. HOUSTON, Gen'l Ticket Agent, Philadelphia.
H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

BUSH & LOBDELL,
Chilled Railroad Car Wheel, Tyre,

—AND—
Railroad Machine Works,
Wilmington, Delaware,
MANUFACTURE

CHILLED WHEELS

—AND—
TYRES,
FOR RAILROAD CARS

AND
LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their
CELEBRATED WHEELS,

Either Single or Double Plate,
With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the
Most Reasonable Terms.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET
NEW YORK.

ALBERT BRIDGES.

JOEL C. LANE

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

through Distance 280 Miles;

42 Miles Shorter than any other Route
NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C., H. and D. Depot, at 7:30 A. M., 10:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; west side of Vine street, between the Post-office and the Burnet House; No. 5 East Third-street; No. 169 Walnut street; Sixth street Depot.

Freight trains leave at 6:00 P. M. and run directly through to Chicago without rebilling or transhipment.

JOHN BRANT, JR., Superintendent
C. E. FOLLETT,
General Ticket Agent, Richmond, Ind.,
S. W. CHAPMAN, Gen. Freight Agent,
Burnet House, Cincinnati, O.

W. M. F. HEWSON, STOCK BROKER,

No. 21 West Third Street,
CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and makes collection

LOW'S RAILWAY DIRECTORY

FOR 1861

CONTAINING
THE NAMES AND RESIDENCES

OF THE
PRESIDENTS, DIRECTORS

AND
OFFICERS

OF ALL THE RAILROADS IN THE
UNITED STATES

they could be ascertained.
Published by James W. Low.

Price one dollar.
Sent postage prepaid by mail for one dollar
and twenty cents.

A few copies only for sale at the office
the Railroad Record,

WRIGHTSON & CO. 167 Walnut Street.

J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,

my21

CINCINNATI

McCALLUM, BRISTOL & CO.,
BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct
McCALLUM'S PATENT INFLEXIBLE ARCHED
TRUSS BRIDGE, for Railroad and Highway purposes
at any point in Ohio, Indiana, Illinois, Missouri, Iowa,
Wisconsin and Minnesota on as favorable terms as any
other bridge and in the most approved and perfect
manner. Parties desiring information, will please
apply to the firm at their Office 99 Third St., Cincinnati,
or to McCallum, Seymour & Hawley, No. 110 Broad-
way, N. Y. Ag. 26.

MIDDLETON & STROBRIDGE,
LITHOGRAPHERS AND ENGRAVERS,

Walnut St., CINCINNATI.

Special attention given to all kinds of work in our line,
such as Show Cards in one or more colors, Maps, Bonds,
Portraits, Certificates of Stock, &c., &c.

CONTRACTS for Rails at a fixed price, or on com-
mission, delivered at an English port, or at a por-
United States, will be made by the undersigned
THEODORE DEHON,
no1 10 Wal Broadway, New York

EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



LOCOMOTIVE & RAILROAD
CAR SPRING

MANUFACTURER,
WILMINGTON, DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky.,

Lafayette, Ind.,

Indianapolis, Ind.,

Columbus, O.,

Dayton, O.,

Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIZES, impossible to unravel, and leaving no chain or
ridge on the under side, the economy of thread, and adap-
tability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

Send or call for a circular, containing all particu-
lars, prices, testimonials, etc. feb12.

WM. SUMNER & CO.

MOSELEY'S
WROUGHT IRON

ARCH BRIDGES

-AND-

Corrugated Iron Roofs

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly
on hand, painted, and ready for shipment, with
instructions for applying them. Give us your orders at
No. 66 West Third Street, Cincinnati, Ohio.
Spt. 2.

MOSELEY & CO.

JAMES FOSTER, Jr. & CO.,
MATHEMATICAL AND PHILOSOPHIC-
AL INSTRUMENT MAKERS,

S.W. CORNER FIFTH AND RACE,

Cincinnati, Ohio.

Drawing Instruments, Scales of all kinds, Barome-
ters, Thermometers, Spectacles, Microscopes, etc., al-
ways on hand. Repairing attended to.

H. TWITCHELL.

JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.:
Pennsylvania, are prepared to execute orders for Street and
other Rails on terms favorable to parties wanting to pur-
chase Ag. 4, m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods.

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron
hammered. The whole operation from ore to finished Iron
is conducted at our own Works June 9.

THE SCHENECTADY
LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness
the best and latest improved

COAL OR WOOD BURNING
LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

-AND ALSO TO-

Rebuild and Repair Locomotives.

The above works being located on the New York Central
Railroad, near the center of the State, possess superior
facilities for forwarding their work to any part of the coun-
try, without delay.

JOHN ELLIS, President.

WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boil-
er Flues—from 1 1/4 to 10 inches outside diameter, cu-
to definite lengths.

Wrought Iron Welded Tubes—from 1/2 inch to
8 inches inside diameter, with screw and socket connec-
tions, for Steam, Gas, Water, or other purposes, and fit-
tings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong
and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—1 1/2 to 24 inches
diameter, and branches, for same, &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS,

THOS. T. TASKER, JR.,

CHAS. WHEELER,

S. F. M. TASKER,

HY. G. MORRIS.

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ers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, MARCH 27, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.

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	Depart.	Arrive.
Cincinnati, Hamilton & Dayton—		
Logansport & Chicago Express.....	7.30 A. M.	9.15 P. M.
1st R. I. C. T. & Sand. Mail.....	7.30 A. M.	5.45 P. M.
Dayton & Toledo.....	7.30 A. M.	9.15 P. M.
2nd. Ham. Accommodation.....	9.00 A. M.	8.19 A. M.
3rd. Richmond, Day & Bell'n Ex.....	3.30 P. M.	9.15 P. M.
4th Dayton, Tol. & Detroit Ex.....	5.30 P. M.	11.25 A. M.
Logansport and Chicago Express.....	7.30 P. M.	8.10 P. M.
Glendale Accommodation.....	7.40 P. M.	7.40 A. M.
6th Columbus Express.....	7.40 P. M.	7.40 A. M.
Little Miami—		
Morrow Accommodation.....	7.40 A. M.	1.30 P. M.
2d. Day Express.....	9.45 A. M.	6.50 P. M.
Camp Dennison Accommodation.....	3.15 A. M.	6.10 P. M.
3d. Columbus Accommodation.....	4.40 P. M.	10.31 A. M.
4th. Xenia Accommodation.....	5.50 P. M.	5.00 A. M.
Marietta & Cincinnati—		
1st. Mail Express.....	8.10 A. M.	10.05 A. M.
2d. Accommodation.....	3.30 P. M.	5.45 P. M.
Cincinnati, Wilmington and Zanesville—		
1st. Mail Express.....	9.45 A. M.	8.00 A. M.
2d. Accommodation.....	5.50 P. M.	6.45 P. M.
Ohio & Mississippi—		
1st. Mail Train.....	7.00 A. M.	10.05 P. M.
2d. Aurora Accommodation.....	3.5 P. M.	7.55 A. M.
3d. Express Train.....	7.20 P. M.	8.28 A. M.
Indianapolis & Cincinnati—		
1st. Mail.....	5.50 A. M.	9.45 A. M.
2d. Accommodation.....	2.45 P. M.	5.40 P. M.
3d. Chicago Express.....	5.00 P. M.	12.20 A. M.
Kentucky Central—		
1st. Express.....	6.38 A. M.	10.44 A. M.
2d. Accommodation.....	2.24 P. M.	7.10 P. M.
Cincinnati & Chicago Air Line—		
1st. Mail.....	7.30 A. M.	9.15 A. M.

COAL PRODUCTION OF PENNSYLVANIA.

The anthracite coal of Pennsylvania being not only the great means of furnishing heat for domestic purposes in the Eastern and Middle State, but especially the great staple for furnishing steam power, the production of this article is an interesting subject for statistics. We find in the *United States Railroad and Mining Register* the following elaborate statement of the production during the past year:

AREA AND PRODUCT OF THE ANTHRACITE COAL REGION OF PENNSYLVANIA.

Hitherto the anthracite region of Pennsylvania has been described in three separate divisions or fields, the Southern, the Middle and the Northern; the Middle Coal Field being subdivided into the "Eastern middle" district comprising the Hazleton, Black Creek, and adjacent basins, and the "Western-middle" district comprising the Mahanoy and Shamokin basins.

The great market for all these regions is on tidewater, in which the cities and towns along the seaboard, the interior country deriving its supply chiefly from the vast deposits of bituminous coal lying west of the crest of the Appalachian Mountain range. The preference given to anthracite for special uses causes it to penetrate in small quantities over long distances inland, particularly to ports on the lakes; and with additional facilities for transportation, the interior market will exhibit increased consumption of anthracite. Still, the bulk of the joint production of the anthracite mining districts seeks the seaboard, the carriers meantime distributing a considerable tonnage at way points between their termini. Among these carriers there exists no inconsiderable competition, owing to the circumstance that, in the several anthracite fields, there prevails a tendency to open new collieries and thereby increase the production in a ratio beyond the increase of consumption, the general market, moreover, being exposed to serious fluctuations.

The physical characteristics of the anthracite territory, whose topography exhibits a most irregular corrugated surface, limits the number of artificial outlet by giving to those routes which follow the water courses to tide-water such advantages (considered with reference to cost of transportation,) as make it apparent that the existing carriers down the valleys of the Schuylkill and the Lehigh will ever continue to serve as the main outlets from the Southern and Middle Coal Fields; and that from the Southern end of the Northern Coal Field—whence the canal route down the Susquehanna as heretofore constituted the greater outlet and the rail and canal route via the Lehigh and lesser outlet—there will hereafter be sent a larger number of tons by way of the Lehigh Valley. That part of the Northern Coal Field which is north of Pittston and its vicinity, finds a market over routes which diverge in directions away from the

Southern Coal Fields. Hence the coal tonnage of the Northern carriers is exclusively from the Northern Coal Field; whereas the Southern carriers, the most northern of which diverge from the Wyoming Valley, down the Susquehanna and the Lehigh, accommodate a coal tonnage contributed from the several basins encountered on their routes.

And since the quantity of coal sent to market over southward routes from the Northern Field is easily ascertained, and since, moreover, the coal mined in the Southern and Middle Coal Fields is sent to market over the same and other plainly defined routes, we have concluded, for greater simplification in our exhibit, to represent the anthracite territory in two grand divisions—South and North. In the Southern division or field are included all the coal basins South of the Nescopeck Mountain; in the Northern division or field is included the canoe-shaped basin North of Wyoming Mountain, which is watered exclusively by the North Branch of the Susquehanna and the Lackawanna rivers, whose junction is Pittston, near the center of the coal area.

The Southern Coal Field, situated between the Mountains Nescopeck and Kittanning and the river Lehigh and Susquehanna, comprising the Schuylkill—Lehigh—Mahanoy—Shamokin—Wiconisco—Swatara basins or districts contains 233 square miles or 149,120 acres. The Northern Coal Field comprising vale Wyoming and dell Lackawanna contains 178 square miles or 113,920 acres, making a total area of 411 square miles or 263,040 acres.

The following is the amount of coal brought to market from each of these two regions during the past two years:

	1861.	1860.
Southern Coal Field.—		
Name of Outlet.	Tons.	Tons.
Philadelphia and Reading R. R.....	1,350,832	1,878,156
Schuylkill Canal.....	1,183,700	1,366,658
Lehigh Valley Railroad.....	743,762	731,622
Shamokin Valley and Pottsville R. R.....	241,451	210,108
Treverton Railroad.....	49,636	90,148
Lykens Valley Railroad.....	170,392	176,274
Lehigh Canal Canal.....	853,631	999,760
S. & Susq. R. R.—west from P. G. (abt)	10,609	14,719
Union Canal.....	42,171	75,699
Total Southern Coal Field.....	4,785,375	5,481,979
Northern Coal Field.—		
Name of Outlet.		
Delaware and Hudson Canal.....	1,376,361	1,501,191
Del. & Lack. & Western R. R.....	1,104,319	1,060,258
Wyoming Canal.....	263,521	233,996
Lehigh & Susq. R. R. (W. B. to W. R.).....	1,111,074	1,100,577
Lack. & Bloomsburg R. R. (south).....	.....	.....
North Branch Canal.....	53,244	52,965
Total, Northern Field.....	3,848,459	3,817,957
Brought down.....	4,785,375	5,481,979

Grand total both fields..... 7,673,834 8,300,936

*Tonnage received at White Haven from Lehigh and Susquehanna R. R. not included.

†Passes upon the Lehigh Canal at White Haven, and is to be added to the tonnage of said canal derived from the Southern coal field.

The increase of coal productions at each successive decade since 1820 is shown as follows:

SCHUYLKILL REGION—HARD ANTHRACITE.	
1820.....	.....
1830.....	89,984 tons
1840.....	452,291 "
1850.....	1,712,067 "
1860.....	3,234,844 "
1861.....	2,644,402 "
Total in 42 years.....	46,503,794

LEHIGH REGION.

1820.....	365 tons.	
1830.....	41,750 "	
1840.....	225,318 "	
1850.....	690,456 "	
1860.....	1,821,474 "	
1861.....	1,738,377 "	
Total in 42 years.....	21,315,723	
	Pine Grove Region.	Shamokin Region.
1830.....		
1840.....	23,860	15,545 tons.
1850.....	70,519	19,921 "
1860.....	145,181	210,108 "
1861.....	168,148	241,451 "
Total since 1837.....	1,710,269	1,481,395 "

WYOMING AND LACKAWANNA REGION.

1820.....	365 tons.
1830.....	43,070 tons.
1840.....	142,470 "
1850.....	827,823 "
1860.....	2,738,573 "
1861.....	2,834,137 "
Total since 1826.....	27,556,792

The grand aggregate of the hard anthracite coal production from all these regions has been as follows:

1820.....	365 tons.
1830.....	174,734 "
1840.....	864,384 "
1850.....	3,321,116 "
1860.....	8,123,513 "
1861.....	7,726,315 "

It will thus be seen that since 1850 the anthracite coal production of Pennsylvania has more than doubled, the greatest production in any one year being in 1860.

The semi-anthracite and bituminous coal of Pennsylvania was first mined in the year 1840. Since then the production has been as follows:

1840.....	4,325 tons.
1850.....	60,924 "
1860.....	579,564 "
1861.....	646,305 "

Total since 1840.....3,738,603 "

The total shipments from Cumberland, Maryland, during the same period amount to 6,618,520 tons.

Were the whole of the coal produced in the anthracite coal region of Pennsylvania consumed in the development of power, it would be equivalent to the power of about 762,651 horses, allowing the annual consumption of 10 tons per horse power per year of 300 days of 10 hours each. This is very near the true allowance of consumption of fuel. But as a large amount of the coal produced is employed for domestic purposes, it is hardly probable that the amount of power obtained from the annual coal product of Pennsylvania amounts to much more than half of the above amount, say 400,000 horse power per annum.

NEW PROJECTS.—We see it stated in the Eaton Register, that a company has been formed to build a railroad from the terminus of the Indiana Central Railroad, at Richmond, through Greenville to Covington, Ohio. The object of this movement is to give the Indiana Central an eastern connection over the Piqua and Columbus Railroad.

The same writer suggests the propriety of constructing a railroad from Eaton to Greenville and forming a through connection with the Cincinnati and Mackinaw Railroad.

STEEL SURFACED RAILS.

We copy from the Journal of the Franklin Institute the following extract from the London Mining Journal, on the improvement in rails by converting their surface into steel. If the economy accomplished by the process is one fourth what is claimed for it, it would be well worth the attention of our railroad managers. The Journal says:

We learn that the use of Mr. Dodd's steel surfaced rails, to which we have upon several previous occasions referred, is gradually becoming more extended, through the great durability which they are found to possess rendering their application very economic. The mode adopted for steeling the rails is so simple, that there is little addition to the cost, yet so great is the effect produced upon the rail that it will last at least thrice as long as an ordinary rail, and it is estimated that the saving upon each hundred miles laid is equal to nearly £120,000. We have already mentioned several of the principal lines upon which the rails have been tried, and more recently it has been decided to employ them upon several Scotch Railways, and "after great consideration and examination of rails which have undergone Dodd's patent process for steeling the surfaces," Mr. John Fowler has ordered 1200 tons for the Metropolitan Railway. The case-hardening furnace is easily worked, and in three days the surface of the rail to the depth of $\frac{1}{8}$ -inch, can be converted into hard and durable steel.

DUBUQUE AND SIOUX CITY R. R.

This road was formerly known as the Dubuque and Pacific Railroad. It is open from Dubuque to a point 20 miles beyond Cedar Falls, a distance of 131 miles. We are in receipt of the second annual report, dated February 8, 1862. Mr. Stimson, the President, says:

Appointed so recently to the position I occupy no extended report from me at this time will be expected. The accompanying reports of the Superintendent, Treasurer and Freight Agent will give you a satisfactory account of the road, its earnings during the past year, and its prospects for the future. I would call your attention to the fact that no accident of even the most trivial nature has occurred during the year; also to the large earnings made with our limited machinery and rolling stock—both indicating great care and energy on the part of our Superintendent and employees.

Since my appointment I have been able to settle up the entire back pay-rolls which amounted to over \$12,000; also a large amount due upon old vouchers; besides diminishing the floating debt over \$12,000. Provision should at once be made for the indebtedness incurred for iron in the construction of the last twenty miles, as well as for

engines and cars, secured by liens upon the same; also for other indebtedness of a pressing nature.

By order of the Board of Directors a circular was recently issued asking the consent of the preferred stockholders to mortgage the first hundred miles of road, the bonds to be used at par in payment of the floating debt; as yet but few responses have been made.

You have here, gentlemen, a valuable property to which you are giving too little attention. If judiciously managed and looked after its value will be greatly enhanced and it will yield large returns.

The following is the general balance sheet of the Company:

GENERAL BALANCE SHEET, D. & S. C. R. R. CO.,
JANUARY 1, 1862.

	Dr.
D. & P. R. R. Co. obligations.....	\$2,539,345 08
Construction.....	239,618 63
Engineering.....	3,582 75
Right of Way.....	6,749 55
Equipment.....	47,553 32
Bills Receivable.....	5,059 53
Company Expenses.....	5,347 47
Individual accounts.....	21,921 72
Cash in Bank.....	632 72
	\$2,870,013 77
	Cr.
Capital Stock.....	\$2,469,776 60
Bills Payable.....	219,249 63
Judgment Liens.....	11,465 64
Land.....	19,927 37
Edward Stimson, "Trustee".....	43,500 00
Dividend Fund.....	113,065 53
	\$2,870,014 77

The capital stock of the company consists of \$149,700 in preferred shares, with fractional preferred shares amounting to \$4,203 66, and 979,900 in common shares, with fractional shares amounting to \$5,972 94. The income account of the past year has been as follows:

INCOME ACCOUNT.

Freight earnings as per statement of General Agent.....	\$152,180 68
Passenger earnings as per statement of General Agent.....	42,935 24
Mails as shown by Treasurer's Books.....	4,294 19
Rents.....	749 94
	\$200,160 05
LESS	
Expenses of Operating.....	\$99,731 07
Interest and discount applicable to same.....	7,999 29
Portion of Company Expenses, Salaries, &c.....	10,000 00
Taxes paid.....	650 48
	\$118,381 44

Amount net earnings for year 1861, to credit of Dividend Fund.....	61,778 61
Add amount to credit of Dividend Fund at last annual report.....	31,316 92

Amount as shown in general balance sheet.... \$113,095 53

The affairs of the old company were settled under a decree of foreclosure. Under this decree the following liabilities have been discharged:

Land grant construction bonds of \$1,000 each.....	\$1,136,000 00
50 ".....	4,400 00
Matured coupons on \$1000 bonds, and interest on \$50 bonds.....	148,211 42
Matured coupons on 1st and 2nd mortgage bonds, and interest on same.....	1,007 28
Capital Stock certificates assigned.....	839,800 00
Optional right certificates on which \$1 each share had been paid.....	21,179 00
Interest dividend on capital stock surrendered.....	49,733 00
Scrap notes.....	3,743 45
Bills payable.....	49,151 91
Interest.....	11,051 18
Construction account second 40 miles (freight on iron paid in stock).....	59,762 80
Discount on bonds sold by Trustees.....	2,938 13
Obligations of Trustees for wood, engineering, right of way, salaries, &c.....	4,742 47

\$2,301,254 64

Amount to debt of this account at last annual report.....	237,458 44
	\$2,539,343 08

The following is the statement of the construction bonds and coupons of the Dubuque and Pacific Railroad Company, outstanding on the 1st of January, 1862:

CONSTRUCTION BONDS SOLD AND OUTSTANDING.

Thousand dollar bonds, 264.....	\$264,000
Coupons on same, { 503 at \$35.....	17,005
{ 207 at \$25.....	5,175
Fifty dollar bonds, 126.....	6,300
Interest on the same to the 9th of August.....	616
Coupons outstanding { 98 at \$35.....	3,430
{ 12 at \$25.....	300
Total of sold bonds and coupons.....	\$297,436

PLEGDED AND OUTSTANDING.

Thousand dollar bonds, 88.....	\$88,000
Coupons on same, { 428 at \$35.....	14,980
{ 88 at \$25.....	2,200
Total of pledged bonds and coupons.....	105,180
Total outstanding.....	\$402,696

The following is the statement of the lands belonging to the Company:

Corrected estimate of quantity of lands granted by Congress to aid in building the road.....	1,226,163.05 acres.
Deduct, sold by Dubuque and Pacific R. R. Co.....	845.05 acres.
Sold by Trustees of D. & P. R. R. Co.....	348,531.51
	349,376.56 "
Quantity of grant which passed to D. & S. C. Co., as per statement below:	
Sold.....	7,382.47 acres.
Pledged.....	76,981.76 "
	84,363.83 "
Total land grant, undisposed of	792,422.66 "

The lands sold by the Dubuque and Sioux City R. R. Co., being 7,382.47 acres, realized \$15,176.61, or a little over two dollars per acre. This is a very low average and it is to be regretted that the Company could not have held them for better prices.

The Superintendent in his report says:

The general condition of the road has not only been fully maintained, but has been greatly improved by a more thorough system of drainage and track repairs. This improvement was much needed; it adds greatly to the efficacy of our small rolling stock, effects a great saving in fuel and in the wear and tear of track and machinery, and increases the safety of the trains. The road may now be considered in a fair but not decidedly good condition.

The pile and trestle bridge, about fifteen hundred feet in length, across the slough near the Dubuque depot, is so decayed as to be unsafe, but it is now being filled with earth, leaving only one span of fifty feet. The filling will cost four thousand dollars, but it will be a permanent improvement. The other bridges are in good order.

There are many defective and broken rails in the track, which should be replaced by new ones. About one hundred tons of new rails would put the track in good order. The old rails which should be taken out are much needed to lengthen the side tracks, which at several stations are inconveniently short.

The comparatively straightness of the westerly eighty miles, the small amount of wood-

en structures, the absence of deep cuts and high embankments, furnish an ample guarantee that the road can be maintained in good repair at a moderate expense.

There are some deep cuts and high embankments on the easterly twenty miles, where the repairs will be necessarily more expensive but not excessively large.

The rails in the track have not been maintained as good as they were at the commencement of the year. I estimate the depreciation at about five thousand dollars. This should be taken into consideration in estimating the net earnings. In other respects, the condition of the property has not only been maintained, but improved.

EARNINGS, EXPENSES, TRAIN MILES, ETC.

The gross earnings for the year from all sources are \$199,410 11, while the expenses actually paid are \$99,731 07, to which should be added about five thousand dollars for depreciation of rails during the year. This will leave a net gain of \$94,679 04. The lack of adequate motive power has caused us to lose from ten to fifteen thousand dollars worth of business.

The train miles during the year were 107,646. This shows very fair earnings for the miles run, nearly \$1.85 per mile; while the expenses have been 93 cents per mile, which compared with the average of other roads is quite satisfactory.

The yearly earnings of the road have been as follows:

Year.	Earnings.	Increase over previous year*
1858.....	\$62,519 08	
1859.....	58,620 19	
1860.....	121,125 95	\$62,405 76
1861.....	199,410 11	78,284 16

The business and productions of the country naturally tributary to our line are increasing rapidly. I think I may fairly estimate the gross earnings of 1862 at not less than \$260,000; and the net earnings at about \$130,000.

The only item in the account of the expenses which appears to me excessively large, is the cost of fuel. There were several causes for this excess, part of which have been removed. Prominent among those causes was the use of green wood; an evil which can not be remedied at once. The price of wood varies from \$2 to \$3.40 per cord. If a sufficient quantity of wood be kept on hand so that we shall not be compelled to use green wood, a great saving in cost of fuel will be made. The building of four wood houses, one at Cedar Falls, one at Raymond, one at Independence and the other at Manchester, twenty-four feet by one hundred feet, with good shingle roofs, would not cost over \$400 each, and they would save more than their cost in one year. With this accomplished, and a good stock of dry wood kept on hand, fuel would probably not exceed nine cents per train mile, and the efficacy of the trains be increased at least ten per cent.

WAREHOUSE AND STORAGE FACILITIES.

The station houses at the several stations west of Dubuque needs thorough repairs. The Dubuque Elevator with some alterations, can be made to do the handling of a large wheat business while the Mississippi is open; but its capacity for winter storage is entirely inadequate for the present wants of the company. There is a fair prospect that large additions will be made to it before next winter. Increased facilities are required for handling and storing flour at Dubuque. We also need a cattle yard there.

The numerous grain houses on the line of the road built by individual enterprise on the depot grounds, under license from the company, have been of great service, not only in drawing business to the line, but in facilitating the loading and unloading of cars. The liberal policy of the company in granting these rights for nominal sums has had the effect to locate capital and stimulate competition, which draws business a long distance. There is yet room for several investments of this sort, which will doubtless be occupied soon.

WINDMILLS.

We have five windmills used for raising water. They answer the purpose well, and each saves the wages of a man. Under the old system a stove was required at each water station. The saving by the windmills will pay for themselves in a year. We now have an abundant and never failing supply of good water at all points where it is needed on the line.

EQUIPMENT, TOOLS AND MACHINERY.

We have four first class locomotives, two of them are in good order, and one is being repaired, and the other needs repairs. We have also two 12 ton pony engines, and one switching engine; all in good order. In all seven locomotives.

We have 65 box cars, 35 flat cars, 2 baggage cars, and 7 passenger cars; all in good order.

We have also 12 tarpaulins, which can be used for covering freight on the platforms or on the platform cars, which renders such cars about as serviceable for the transportation of freight in bad or stormy weather as box cars.

We have cars enough to do a business at least three times as large as we ever did in any month; but to do this we should have more locomotive power. Six first class locomotives, in good order, would probably do the business of next fall in case the road is not extended. Five could have been worked to good advantage last fall. But it is hardly possible to have all our engines in good order at one time, and especially to keep them so for several months together.

In order to enable us to work our rolling stock to its utmost capacity, we should have one freight engine for every ten cars. An engine can run one hundred miles a day; but freight cars, which require oiling only once a

month, can easily run two hundred miles in 24 hours. Thus, an engine can leave Dubuque with 20 cars and go to Cedar Falls, 100 miles, and another engine can bring them back, performing the round trip in 24 hours. This has been done and there is no difficulty in moving our cars, on this principle, when the business requires it. All that is required is care, energy and discipline, qualities that are generally possessed by the agents and employees in my department. Nor is there any difficulty in moving all of our cars that can be put in good order at one time. Thus, if we had ten locomotives, our hundred freight cars can be made to pass twice over the line every 24 hours, giving 4 hours at each end to load and unload. The possibility of running trains on this principle was fully tested last November. Sixty cars used in this manner would deliver twenty thousand bushels of wheat in one day, or six millions two hundred and fifty thousand bushels in one year of three hundred and twelve working days.

A round house for our engines is much needed at Dubuque; our shop is inconveniently small for the repair of two engines at one time, but if we had a round house where the engines in use could be wiped and cleaned, our present shop would do for repairs.

We are also much in need of a wheel lathe for turning tires. We have now either to be at great expense and delay in sending them to Chicago, or to do a slow and bungling job the best way we can without a lathe.

The rapid increase of business on our line has taken our neighbor, the Illinois Central, as well as ourselves, rather by surprise. The facilities at Dunleith for loading and unloading are about to be increased, and arrangements are being made to run through freight trains from Dunleith to Chicago. When this arrangement shall be put in efficient operation, freights can be moved from Cedar Falls to Chicago in thirty six hours, whereas it has heretofore usually taken many days. This change will be worth two or three cents a bushel on wheat in Northern Iowa; it will add much to the business and popularity of the line.

CLEVELAND AND PITTSBURGH RAILROAD.

The following is the report of the Directors of this company, made on the first Monday of January, 1862. It will be found interesting to those who have anything at stake in the road. It is marked with candor, and frankly points out the errors that were committed in the early history of the company.

In connection with the annual report made a year ago, the Directors offered to the unsecured creditors of the Company, (including the holders of the River Line Bonds, Income Bonds, Dividend Bonds, and Bills payable,) a plan of compromise. This plan proposed to as-

sume the business of the year 1860 as a fair standard for estimating the ability of the company to pay its debts, and after making a proper allowance for the existing charges upon the road, viz: operating expenses, rent and interest on mortgage bonds, to determine on what additional sum the Company might reasonably expect to be able to pay interest, and to apportion this sum, so ascertained, among the creditors, according to a scale of rates, which was deemed just and equitable. Upon making the calculation, it appeared that the company might safely promise to pay the annual interest on \$12,000,000, in addition to the interest on the then outstanding mortgage bonds. The holders of the various classes of claims above mentioned were asked to reduce their claims in the aggregate to this amount, each holder receiving security from the Company for his proportionate share, in bonds secured by a new mortgage on the Road, and surrendering to the Company the remainder of his claim.

From the year 1857 to the close of 1860, the Company had labored under very serious embarrassments with creditors having security; and those who had none. The first mortgage bonds fell due in 1860. The interest on all classes of mortgage bonds was in arrears, and the holders of some of these bonds commenced suit for foreclosure. No interest had been paid on any of the unsecured indebtedness for more than three years. The large claim of the Ohio Life Insurance and Trust Company, growing out of unsettled accounts covering the transactions of several years, embarrassed the action of the Directors, and the difference in views between the Managers of that institution and the Directors of this Company was so great, that it seemed almost in vain to attempt a settlement. An adjustment of accounts was, however, at length made, and during the past year the terms of a settlement, which had been previously agreed on, have been complied with. By this settlement the Railroad Company paid to the Trustee of the Ohio Life Insurance and Trust Company \$270,000 in the River Line Bonds of this Company, and received from him claims against this Company, amounting in the aggregate to about \$75,000.

Having at length fixed the amount of the liabilities of the Company, and removed out of the way some other embarrassments, the Directors were prepared to look at the whole affairs of the Company and present a plan for relief. It was under these circumstances, and with the belief that the creditors were entitled to receive all that the Company were able to pay, and with the desire to give the creditors all this, that the Directors presented their plan a year ago.

This plan, which was approved by the United States Court for the Northern District of Ohio, they are now happy to say, has met with the general acquiescence of the credi-

tors. Those who were best acquainted with the financial condition of the Company, and with its prospects, were the most prompt and ready to avail themselves of its provisions. The substantial justice and equity of the offer made by the Company has been demonstrated by the success which has attended it, and the Directors have confidence that those creditors who have not yet secured that portion of their claims, for which they are offered security, will soon avail themselves of the proposition made to them.

In adjusting the details of this plan, a slight change was found necessary in that part of the proposition made to the holders of the River Line Bonds. This alteration increases by a small amount the liability of the Railroad Company, beyond the original proposition, but it is so made as to prevent any holder of those bonds from gaining any advantage by declining to accede to the arrangement. The result is, that so far as is known to the directors, almost every holder who has acquainted himself with the proposition has acceded to it. The offer which is now made to the holders of the River Line Bonds, and which has been accepted by those representing nine-tenths of those bonds, is as follows: The Company engages to pay in two years from Sept. 15, 1861, \$90,000 as the agreed value of the security covered by the mortgage, with semi-annual interest, the principal and interest to be divided pro rata among the holders of these bonds. As security for the payment of this sum of \$90,000, the old bonds are placed in the hands of Trustees, to be enforced against the mortgaged property, if it should become necessary. For the general claim against the Company, which remains over and above the value of the security, and which, as the parties realize their security remain unsecured, the holders of those bonds receive one new bond of \$500 secured by a mortgage on the Road, for each one of their old bonds, with the coupons attached.

The Company still propose to secure 40 per cent. of the principal and interest of the Bills Payable, and 30 per cent of the principal and interest of the Income and Dividend bonds still outstanding.

Of the indebtedness of the classes named, and which was embraced in the proposition made a year since, amounting at that time to \$3,050,189.39, there has been taken up by the Company \$2,220,315.27, and 793,120.43 new bonds and certificates issued therefor.

The financial condition of the Company as it was at the close of the fiscal year, Nov. 30, 1861, appears from the following statement:

DR.	
Construction account,.....	\$8,172,139.97
Telegraph line,.....	16,913.72
Personal Property,.....	29,314.58
Balance of personal accounts,.....	92,777.32
Assets in hands of Receiver,.....	171,764.80
	\$8,112,914.39

CR.	
Capital Stock,.....	\$3,846,321.11
1st mortgage bonds,.....	800,000.00
2d do. do.	1,189,000.00
3d do. do.	1,166,000.00

Funded Debt Bonds,.....	793,120.43
River Line Bonds, ...	145,000.00
Income Bonds,.....	15.00
Dividend Bonds,.....	123,127.00
Bills Payable,.....	334,932.58—\$8,412,914.30

It has been the policy of the Directors, for the past four years, to create no new liabilities but as rapidly as practicable to reduce those already existing. The large cost of the road, and the embarrassments of the Company for several years past, from which they are now striving to recover, have resulted from the fact that large items of indebtedness were recklessly incurred without the means of payment being provided, and when payment could be no longer deferred, new bonds were executed and thrown on the market, and sold at ruinous rates of depreciation. In this way the cost of the road has been very largely increased, and the liabilities reached a point beyond the ability of the Company to pay. The policy which has been pursued since 1857 should, in the judgment of the Directors, be steadily continued, and some portion at least of the heavy loss heretofore sustained be now recovered. The proposition of compromise, when fully complied with, will reduce the indebtedness of the Company \$1,800,000, but the Company will regain in this way only a portion of what they have lost in the sale of their securities.

The estimate made a year ago was based upon a gross receipt of \$1,000,000, and showed the ability of the Company to pay the interest upon all the bonds secured by the three mortgages, as well as that to accrue hereafter on the new funded debt mortgage bonds. It was also estimated that the Company would be able to pay \$50,000 annually, in the reduction of the indebtedness secured upon the road. The Directors see no reason to change their estimate of the ability of the road to earn this amount of money, and to make the annual payments as estimated. The business of the road for the year just closed, as stated hereafter, would perhaps justify a large estimate, but the increased receipts for the year 1861 have been brought about by causes which may be only temporary. It is certainly not safe to base calculations for the future upon them. But whether the earnings of the road shall hereafter be larger than for the year 1860 or not, it is the opinion of the Directors that the whole earnings of the road, after paying the expenses of operation and the charges for rent and mortgage interest, should be applied to the liquidation of those debts which have full security on the road, and which are now due. Otherwise, there is no assurance that the mortgages will not be foreclosed, and the whole property of the Company sacrificed. It can not be the policy of the Company to pay any portion of their earnings on unsecured claims, and justice to those who have surrendered a portion of their debts to secure a part would not allow a different settlement to be made with others. The legality and

propriety of paying those debts which have prior liens and are due can not be disputed, and those creditors who have no security can not expect to gain precedence over those who already have security.

There is now due, of debts secured upon the Road, nearly one million of dollars, and the surplus earnings of the Company, even if they equal the most sanguine expectations, will be required for some years to come to pay off those prior claims which are already due. The whole amount of bonds secured by mortgage is now about four millions of dollars, and will fall due faster than the ability of the Company to pay. We think no new bonds should be issued to replace them, but that the holders will receive the interest on them, as over due bonds, with such portion of the principal, from year to year, as the Company has the ability to pay. This course has been pursued with the first mortgage bondholders, and in this way, and in this only, can the property of the Company ever be made of value to the Stockholders.

So well satisfied are the mortgage creditors of the soundness of the policy thus indicated, and of the speedy success of the compromise proposed and so nearly completed, that the suit for foreclosure, which was in progress, has been withdrawn, and this cause of disquietude is removed.

It now remains to give a statement of the operation of the road for the past year, taken from the Receiver's books.

Cash on hand, December, 1, 1860,.....	\$ 6,820.93
Receipts from freight,.....	682 251.14
Receipts from passengers,.....	376,936.48
Receipts from mail, express, rents, &c.,.....	55,750 78
	\$1,121,829.33

	CONTRA.	\$1,121,892.33
Payments for expenses of operation.....		\$616,335.41
Payments on Pittsburgh, Ft. Wayne & Chicago lease		85,000.00
Payment of interest on 1st mortgage bonds,...		65,730.00
“ “ 2d “ “		129,345.00
“ “ 3d “ “		123,235.00
“ general interest and exchange....		6,789.00
“ for new engines and cars.....		18,041.21
“ new bridges.....		27,331.51
“ other expenses, not properly be- to operating expenses		4,258.15
Assets in hands of Receiver, Nov. 20, 1861,...		45,551.16
		<u>\$1,121,892.33</u>

It will be noticed that the receipts from the business of the road are larger than they have ever before been in the history of the Company.

In the last report the Directors estimated an arrearage of mortgage interest equal in amount to \$100,000, while the current interest accruing during the year amounted to \$220,850. It appears from the account stated above that there has been paid \$318,290 of mortgage interest, and the amount still due and unpaid must be very trifling. The readiness of the Receiver to pay all mortgage interest past due has been advertised in the newspapers of Cleveland and New York, and none remains unpaid which has been presented.

The Company then commences the new year with the interest on its mortgages paid in full, with the expectation that the interest

on all its mortgage bonds can be met from the earnings of the road. If the claims which have not yet received their share of security shall be soon arranged they will receive their share of the interest, but if not the whole of the earnings of the road that remains will be applied to paying those claims which have a priority.

The income of the road for the year ending November 30th, 1861, has been as follows.

From Passengers.....	\$376,936.48
Freight.....	6,925,414
Mail.....	21,585.48
Express.....	22,572.62
Oysters.....	4,968 15
Storage and Rent.....	374.50
Foreign Car Service.....	4,249.79
S. and I. R. R. Contract.....	2,001.04

Total,.....\$1,114,941.40

EXPENSES.

Motive Power and Cars.	
Fuel.....	\$36,497.09
Water.....	6,750.76
Oil and Waste.....	13,424.52
Engineers and Firemen.....	39,077.77
Engine Wipers.....	8,746.62
Locomotive Repairs and Incidental Expenses.....	57,454.87
Passenger Car Repairs.....	14,782.95
Freight Car B-Repairs.....	29,982.40
Repairs of Machinery and other incidental Expenses at Shops.....	14,071.20

Total.....\$240,538.18

Maintenance of way and Structures.....	\$190,152.39
Transportation and General Expenses.....	\$185, 94.84

Total.....\$616,335.41

Total Earnings.....	\$1,114,941.40
Total Expenditure...	616,325.41

Net Earnings.....\$59²,605.99

The total number of miles run by all trains

is as follows:

By Passenger Trains on Main Line.....	156,203
" Freight " " "	139,104
" Freight " River "	184,639
" Freight " " "	144,529
By Passenger and Freight Trains on Tuscara- wa Branch	20,246
By Wood, Construction and Gravel Trains, Switching Engines.....	135,184

Total Miles run.....800.525

The equipment of the road consists of 45 locomotives, 29 sixty seat first class passenger cars, 1 sixty seat second class passenger car, 5 express cars, 13 baggage and mail cars, 9 freight train way cars, 335 eight wheeled house freight cars, 425 eight wheeled platform and gondola cars, 57 four wheeled gravel cars, 31 hand cars, 20 ditching cars, 1 wrecking car.

A SUSPENSION BRIDGE IN SOUTH-ERN ITALY.

A Prussian correspondent of the Railway Review gives the following description of a gigantic project for a suspension bridge in Southern Italy. It will be read with interest by our readers:

* * *

M. ADOLPHE AUDRY, *Ingénieur du corps Imperial des Ponts et Chaussées à Paris*, has proposed to unite Calabria to the island of Sicily, by means of a suspension bridge over the Strait of Messina.

The distance across the Strait is about two miles and eight-tenths, requiring, for each line of the suspension chains, one thousand six hundred feet in length, while the intervals proposed between each of the points of suspension are one thousand metres (three thousand and two hundred and eighty one feet) each;

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa. Md.	48	380	\$ 13,111,800	\$ 10,781,833	\$ 566,070	\$ 3,922,203	\$ 2,303,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
Baltimore and Ohio.....	do									"	2,500,000	6		1885	
do do.....	do									"	700,000	6		1820	
do do.....	do									"	1,125,500	6		1875	
do Washington Branch.....	do									"	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind	30	118	1,650,000	1,256,750	139,129	314,000	8,795	Dec. 1860.	1st Mortgage.....	791,000	7		1866	
do do.....	do									2d ".....	100,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	121	68	1,950,950	1,049,000	27,545	911,019	492,047	June 30, 1860						
do do.....	do														
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,673		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	95		3,984,000	2,800,000		1,997,663	733,950	Dec. 31, 1860	1st Mortgage.....	450,000	6		1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,438	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	800,000	7		1864	
do do.....	do									2d ".....	20,000	7		1865	
do do.....	do									4th " S. F.	956,000	7		1875	
do do.....	do									1st Mortgage.....	1,367,500	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,080	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7		1865 & 1870	
do do.....	do									2d ".....	600,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do.....	do									2d ".....	1,537,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						3d ".....	1,000,000	10			
do do.....	do									1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,750	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.....	1,250,000	7	41 1/2	Feb & Aug 1	
do do.....	do									2d ".....	3,600,000	7	41 1/2	Feb & Aug 1	
do do.....	do									3d ".....	2,000,000	6	11	May 1.	
Chicago and Rock Island.....	Ills.	55	175	5,603,000	1,397,000		1,164,018	455,953	June 1, 1861	1st Mortgage.....	2,000,000	7		1870	
Chicago, Burlington and Quincy.....	"	61 1/2	138	4,689,340	4,814,515		1,514,428	761,830		Consol. Mort. S. F. 2d ".....	2,172,000	8	99	1863	
do do.....	do									1st Mor. Chi. & Aur.	391,000	7		1867	
do do.....	do									2d ".....	303,000	7		1860	
do do.....	do									1st Cent. Mil. Tract	397,000	7		1864	
do do.....	do									2d ".....	215,000	8		1863	
Chicago, Iowa and Nebraska.....	Ind.	82		No report											
Cincinnati and Chicago Air Line.....	do														
Cincinnati, Hamilton and Dayton.....	Ohio.	60		2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000			1867	
do do.....	do									2d ".....	950,000			1860	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000	7			
do do.....	do									2d ".....	532,000	7			
do do.....	do									3d ".....	164,000	7			
do do.....	do									Income.....	305,509				
Cleveland and Mahoning	Ohio.	68 1/2		1,167,473	1,712,000	229,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7			
do do.....	do									2d ".....	490,000	7			
do do.....	do									3d ".....	341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	18 1/2	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L. 2d " M. L. or 1st Ex.	800,000	7	13 1/2	1860	
do do.....	do									3d 2d Ex.....	1,163,000	7		1873	
do do.....	do									4th 3d Ex.....	1,154,000	7		1865	
Cleveland and Toledo.....	Ohio.	46 1/2	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	359,000	7		1867	
do do.....	do									1st " 2d D.V.	263,000	7		1872	
do do.....	do									2d ".....	265,000	7		1862	
do do.....	do									1st Tol. Nor. & Cleve	521,000	7		1863	
do do.....	do									2d ".....	293,300	7		1864	
do do.....	do									Junction Income..	44,000	7		1862	
do do.....	do									C. & T. Income..	300,000	7		1864	
Cleveland, Columbus and Cincinnati ..	Ohio.	109	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula ..	"	98 1/2		3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7		1861	
do do.....	do									2d ".....	303,000	7		1862	
Columbus and Xenia.....	Ohio.	54 1/2		1,490,000	299,700	50,500	See L. Miami.			Dividend.....	272,700	7		1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	1,219,100	249,068									
Dayton and Michigan.....	"	142		2,176,666	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
do do.....	do									2d ".....	2,212,000	8			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7			
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000	7		1875	
do do.....	do									2d ".....	1,000,000	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	do	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	738,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		966,061	1,219,100	249,068	124,140			2d ".....	460,000				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	18,000				
do do.....	do									2d ".....	1,000,000				
Galena and Chicago Union.....	Ills.	69	121	6,028,300	3,524,200	none	1,462,732	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000		100	1862 & 1863	
do do.....	do									2d ".....	1,020,000		99	May 1, 1875	
Great Western.....	Ills.	175		1,000,000	2,391,000		45,943	181,529	May 31, 1861.	1st Mortgage W. D. 1st " E. D.	1,041,000	10			
do do.....	do										1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	64		400,000	No report	75,000	63,141	13,573		Land Mortgage.....	5,000,000		67 1/2	1873	
Greenville and Miami.....	do	32		300,000	473,000					Mortgage Conv.....	1,354,000		30	1869 & 1870	
Hannibal and St. Joseph.....	Mo.	206		1,041,000	10,554,000	220,306	996,907	512,933	Sept. 1, 1860.	1st Mortgage.....	927,000	6		1873	
do do.....	do									1st Mortgage.....	4,000,000	7	102	1869	
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	2d ".....	2,000,000	7		1870	
Hudson River.....	N. Y.	35 1/2	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	3d ".....	1,840,000	7		1875	
do do.....	do									Optional.....	28,000	7		1868	
Illinois Central.....	Ills.	65 1/2	455	15,654,920	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Construction.....	12,885,000	6	93	1873	
do do.....	do									".....	4,115,000	6		1875	
do do.....	do									Debentures.....	42,700	7			
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	60,000	7			
do do.....	do									2d ".....	578,000	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,234	140,659	448,858	230,834		Income.....	35,700	10		1866	
do do.....	do									1st Mortgage.....	500,000	7			
do do.....	do									2d ".....	400,000	7			
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort.....	200,000	7			
do do.....	do									1st Mortgage.....	649,900	7			
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d ".....	314,000				
Iowa.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.	86½		\$ 1,070,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st ".....	2,000,000	7		1861	
do										2d ".....	392,000	7		1873	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	1,000,000	6			
do										1st ".....	290,000	7			
do										2d ".....	1,000,000	7			
do										3d ".....	600,000	7			
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	900,000				
do										2d ".....	1,000,000				
do										1st Land Grant W D	4,000,000	12			
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.	29		514,433	130,000		102,944	42,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1863	
Little Miami.....	Ohio.	61					1,331,050	529,981	Jan. 1, 1862	City Loan.....	174,000	6			
Louisville and Frankfort.....	Ky.	65		1,169,59	334,519		243,910	98,679	June 30, 1861	1st Mortgage.....	218,000	7			
do										1st ".....	2,000,000	7			
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.	288		2,500,000	3,000,000	200,000	643,827	371,402							
do															
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,020	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.	203		8,561,213	190,438	108,150	434,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868	
do										2d ".....	2,000,000	7			
do										3d ".....	1,500,000	7			
do										Sterling Income.....	333,000	4			
do										Domestic.....	928,017				
Michigan Central.....	Mich.	55½	284	6,057,784	7,968,489	125,000	2,120,699	910,169	May 31, 1861	1st Mortgage Sterling	467,483	6		1872	
do										1st " Conv.	500,000	8	100	1869	
do										1st " unconv.	250,000	8		1860	
do										1st " Dollar Conv.	2,500,000	8		1869	
do										1st " S. F. Conv.	4,133,000	8	93	1882	
Michigan South'n & North'n Indiana	Mich &	24½	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861	Mort. Mich. S.....	991,000	8	90	1860	
do										" Nor. Ind.....	985,000	8	81	1861	
do										" Goshen Line.....	1,168,000	8	82	1868	
do										S. F. Toledo.....	2,500,000	8	85	1885	
do										2d Mortgage.....	2,465,000	7	73	1877	
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8			
do										2d ".....	200,000	7			
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8			
do										2d ".....	600,000	8			
Milwaukee and Prairie du Chien.....	Wis.	27½	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7		1891	
Milwaukee and Western.....	Wis.	71		No report											
Mississippi and Missouri.....	Iowa,	55		No report						1st Mortgage Conv.	1,000,000	7			
do										2d " S. F.....	400,000	8			
do										Oskaloosa Div.....	1,425,000	7			
do										Land Grant.....	700,000	7			
New Jersey.....	N. J.	33	34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000	7			
New Jersey Central.....	N. J.	64	64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860						
New York and Erie Pref.....	N. Y.	61½		Sold under mortgage			5,590,916	1,979,400	Sept 30, 1860	1st Mortgage.....	3,000,000	10	5		
do		37½								2d ".....	4,000,000	96			
do										3d ".....	600,000	8	1		
do										4th ".....	4,900,000	76			
do										5th ".....	1,792,000	76			
New York and Harlem Pref.....	Conn.	31½	138	5,717,190	6,055,752	.....	1,142,851	433,716	Sept. 30, 1860.	1st Mortgage.....	2,950,000	7	101	1873	
do		13								2d ".....	1,000,000	7		1864	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7		Dec. 1, 1866	
do											972,000	6		Oct. 1, 1875	
New York Central.....	N. Y.	83½	556	24,000,000	14,613,005	none.	7,369,042	2,661,132	Sept. 30, 1861	Cons. Cert. to St. H.	7,921,000	6	98	May 1, 1883	
do										Mortgage.....	3,000,000	7	104	June 15, 1864	
Northern Central.....	Md.	138		2,260,000	5,890,300	557,926	1,018,103	281,627	Dec. 31, 1860.	Construction.....	2,000,000	6		1869	
North Missouri.....	Mo.			2,433,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6			
Ohio and Mississippi, Eastern Div.....	Ohio & Ind	192		Leased	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500				
do										2d ".....	316,995				
do										Construction.....	4,637,920				
do										Income.....	3,591,185				
Ohio and Mississippi, Western Div....	Ills.	148		.....	3,292,403		No report			State Loan.....	7,000,000	6	38		
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W.....	2,800,000	6			
do										Construction.....	4,500,000	6			
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,060	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,900,000	6		1888	
do										2d ".....	2,319,000	6		1875	
do										2d " Sterling.	1,937,400	6		1875	
do										State Works.....	7,200,000	5			
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report			1st Mortgage.....	2,300,000	6		1894	
Philadelphia, W. and Baltimore.....	Del.	98		5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,737,973	2,335,303	761,555	June 30, 1861	1st Mort. O. & P.....	1,000,000	7		1865	
do										2d ".....	750,000	7		1866	
do										1st " O. & I.....	1,000,000	7		1872	
do										2d ".....	200,000	7		1873	
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,551	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000				
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,005,328	220,850	68,438	May 10, 1861.						
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,607,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1858	
do										".....	997,000	7		1866	
do										".....	1,000,000	7		1875	
Sandusky, Mansfield and Newark.....	Ohio.	125		848,770	1,385,900	132,003	185,974	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1866	
Sharon and Hocking Valley.....	Ohio.	56		400,975	500,000	100,000	110,200	53,100							
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,650,000	200,000				1st Mortgage.....	500,000				
do										2d ".....	450,000				
Steubenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d ".....	900,000	7		1865	
Terre Haute, Alton and St. Louis.....	Ills.	208		No report						1st Mortgage Conv.	1,000,000	7	75	1862	
do										2d " Conv.	2,000,000	7		1868 & 1871	
do										1st " Del. & Ill.	517,000	7		1873	
Terre Haute and Richmond.....	Ind.	100	73	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	210,000	7	75	1866	
Toledo, Wabash and Western.....	Ohio & Ind	54	43	2,123,500	5,996,049	50,389	233,545			1st Mortgage.....	3,400,000	7		Aug. 1, 1866	
do										2d ".....	2,500,000	7	45	Nov. 1, 1871	
do										Mort. Coupons.....	96,049	7		1860 to 1866	

width of road bed, twenty metres, (sixty-six feet.)

Such, then, being the main features of the undertaking, the cogromen that heads this article is fully sustained. But inasmuch as it is only by contrast of proportions that the mind is capable of appreciating exaggerations of any kind, it may not be uninteresting cursorily to examine the subject in that light, and in doing so, it is of course desirable to make the comparison with other suspension-bridges of the nearest cognate character. This necessarily excludes the wire suspension-bridge, first adopted in France, and subsequently introduced somewhat extensively in America, but whether successfully or not is a mooted question, which it is not the object of this article to investigate.

It may not, however, be unimportant to observe that English engineers have generally avoided them, and that there is an undoubted practical defect in them, which, from the nature of things, it is impossible entirely to overcome. For instance, it may be even admitted that steel wire can be produced of uniform cohesive strength—that is to say, that any number of pieces shall bear the same tensile strain with the same results, practically considered, without, in the least degree, diminishing the difficulties to be encountered in its application, whether mechanical or thermal; for a little reflection must show that there are difficulties from both of these causes which are absolutely insurmountable, for it is not possible that every wire shall be, at any one time, under precisely the same conditions of tensile strain, even when every one of them is in a similar vertical plane. When, however, the wires are twisted into ropes, as is usual, the difficulty is greatly increased.

Therefore, admitting the great skill of our engineers and artisans in overcoming difficulties of all kinds, still, however near to perfection they may arrive in some cases, it must necessarily depend upon the individual qualifications of so many operators, when the work to be performed is of large dimensions, that another insurmountable obstacle to perfection is involved. To all these combined may we not attribute the loss of our trans-Atlantic cable?

The Menai Suspension-Bridge carries a weight of five hundred and forty tons, the distance between the points of suspension being five hundred and sixty feet. Telford, the engineer of this bridge, had previously proposed one of a thousand feet between the points of suspension, to cross the river Mersey at Runcorn Gap; but, after his experience with the one before mentioned, he disapproved of such extended application of the principle of suspension, even if he did not disapprove of it altogether, as the practice of other eminent English engineers has done.

The *weight* of the chain itself is always an important item, in the aggregate which it has to sustain; and inasmuch as that must increase with the extension of the interval of suspension, it necessarily follows that there is a point beyond which the weight of the chain itself will produce its own destruction. Any material of twice the strength of another will carry more than twice the *weight*, by, at least, its own reduction therein.

Supposing, therefore, Telford's calculation to be correct, and that the application of wrought iron to a suspension-bridge over an interval of one thousand feet, to be within perfectly safe limits, here we have one proposed of more than three times that extent, and requiring a proportionately greater strength of materials. Can this difficulty be overcome?

The French engineer, M. Audry, proposes to accomplish it, by adopting, as a material for the chains and suspension rods, the most tenacious cast steel known, manufactured by the celebrated firm of Fried. Krupp, of Essen in Rhenish Prussia. He further proposes to harden every link of the chain so as to increase its tenacity; but, as this can only be done at the expense of its toughness, which is the great *feature* of the material, and of safety in its application, we may dismiss that consideration altogether. The almost perfect homogeneity of this cast steel, together with its enormous resilience, far exceeding that of any other metal known, renders it the most safe in application to the purpose intended, as well as the most certain to realize the calculations of the engineer.

This is no small matter, for at least half the usual allowance made to insure safety in structures of cast and wrought-iron is due to anticipated defects in the material itself. It is usual to allow about four times the amount required for the purpose of insuring safety, but the lowest standard of tensile strength is necessarily adopted; whereas, if the higher one were available, or perhaps even the average one, in many cases the excess of strength over that absolutely required would be six instead of four times. This is very far from exaggeration.

Now, surely, if three times the material required is allowed, to insure safety, with such a material as Krupp's cast-steel, the integrity of the structure is infinitely better secured than by any quantity of an inferior kind. If, again, we assume that this cast-steel is but twice the strength of wrought iron, we shall need to employ but one fourth of it to insure the same or even greater security, in any case where its peculiar properties are brought into action. The reduction allowable in the weight of the chain itself is of no small importance, where, as before observed, that item forms so considerable a portion of the weight which has to be carried.

Reducing the design, as the engineer has very properly done, to its simplest elements, gives the fewest possible parts, and thus facilitates the operations of the manufacture of the cast steel, in the important operation of testing, with the greatest accuracy, every link up to the ultimate strain which can come upon it, according to its position in the *catenary*, which the engineer can easily calculate.

Theoretically, each chain—of which there are but two—may be considered as a single bar of steel, the cross-section of which is one hundred inches. Practically, however, it consists of a number of shafts or links, jointed together with a tongue and jaw enlargement, and a bolt passed through them. The bolt, it is presumed, will carry the suspension rods, and thus, by the resolution of forces, insure the tensile strain, being always in the direction of the axis of shafts or links. This mode of construction is doubtless the most simple possible, and insures the utmost accuracy of purpose, but how to accomplish it has yet to be told, for it is evident that no ordinary-sized forgings are applicable to such a purpose.

It is not intended to make any one specially responsible for the observations and calculations contained in this article, most of which are conjectural, as the designs of the engineer are not sufficiently advanced, or at least not sufficiently known, to place them in his account. All that is claimed is, that the information herein embodied comes from authentic sources, and is reliable to that extent.

The weight of the two chains, including the necessary enlargements at the joints, may be

taken at seven hundred and twenty six pounds per lineal foot, which gives eleven million six hundred and sixteen thousand pounds as the whole weight of the two chains, each one being sixteen thousand feet long. Each link will therefore weigh thirty six thousand three hundred pounds, if we make each chain to consist of one hundred and sixty links, and each link one hundred feet long.

There is nothing extraordinary in a piece of cast steel of this weight, and four times as much would not over-test the capacity of Mr. Krupp's works, where there is a steam hammer, the largest in the world, weighing forty tons, and having a fall of ten feet. "*Fritz*" is the name of this monster hammer, and "*Immer druff*" his motto; for he is always going and hits hard.

THE WORLD'S TELEGRAPH.

If this is an age of gigantic movements in warlike enterprise, it is also one not less distinguished for the peaceful triumphs of art and enterprise, and the nations foremost in the one are also foremost in the other. At this very moment, while the United States are in the midst of the greatest civil war of history as to the territory and number of troops engaged, we have spanned the continent with a thread more precious than of gold—a thread of magnetic telegraph wire, over which are flashing things of life and death, of commerce and of war—a line over which tidings are destined to flash in a few months, if not from pole to pole, at least messages that shall encircle the habitable portion of the globe by way of Behring's Straits.

But while we are thus busy with telegraphs on the land, and working them more extensively than any other nation on the globe it may be well for us not to forget that England, whose possessions and colonies are in every sea, is at this moment doing most laborious and expensive work in laying ocean telegraphs. Late mails bring full accounts of the laying of a line from Alexandria to Malta. The line is all laid in the sea at an average depth of about eighty fathoms, though in some parts, between Tripoli and Malta, it runs down to three hundred. The first stretch is from Alexandria, westerly along the coast of North Africa about six hundred miles to Benghazi. There the shore dips in to the southward, and the line proceeds in a southwestern direction to Tripoli, four hundred and fifty miles, and thence to Malta, two hundred and twenty miles. After the failure of the Red Sea line, this new one, much thicker and more carefully coated, shows that the electricians have full faith yet in the practicability of a permanent line of six hundred miles of submerged cable, provided only it be not laid in too deep water.

Thus Europe, Asia and Africa are bound by new telegraphic ties, that will extend from London to Alexandria, and eventually from there to Bombay, thence to Calcutta, and thence to Rangoon. But it will not, cannot stop there. From Rangoon it must and will be pushed to Canton, thence to Nankin, to Peking and to the Amoor, so as to join the line of the Emperor of Russia from St. Petersburg across Behring's Straits, and to San Francisco. Such is the commerce of the world that it is hardly possible that ten years can elapse before the whole of this project is fulfilled. Perhaps, too before very many years have passed, the telegraph line from Tripoli shall extend down to Timbuctoo, and thence to Liberia, and down the African coast, while New Zealand will certainly unite itself and Australia with the Eastern line before it

reaches Canton. The effect of all these admirable facilities of communication upon commerce will be great. The ends of the earth will be brought together, as the sides of this American continent now are. In time of war it will exert a most marked influence, enabling a Government to order an attack on a hostile fort in China or in India, or the recall of an officer or a ship, in a day. It will thus lessen the discretionary assumption of national powers by a single officer, often unfit for such a latitude of authority as now possessed. On the languages of the earth it will exercise a striking influence, undoing the work of Babel, and making speech one—clothing men with tongues of fire. Perhaps the moral effect upon nations will be hardly less wonderful, in inspiring them with a new life and faith in the great truths of civilization, and even of religion, than if it were a new gift of miracles conferred on civilized nations over savage, to attest from heaven their superiority. It will have a remarkable effect in filling up the interstices of civilization. It will populate the desert between here and California, fill up the regions of the Amoor, redeem Siberia, restore Egypt, and make India a new regenerate field of energy and enterprise.—*Appleton's Railway Guide.*

THE OVERLAND EMIGRATION.

If we may believe the accounts which are reaching us from our pacific colonies, the recent developments there are likely to cause new wonders in the way of rapid settlement. Very few of our readers can have fully appreciated the importance of these discoveries, and the effect they are likely to have upon the future of the Pacific division of the Union; but the subject is now coming up before the public more prominently, and in all probability we shall witness another grand rush westward, both over land and by sea. It is almost startling to read that already in the desolate and despised regions of Nevada they have seventeen thousand civilized settlers, and gold and silver mines, quartz, grist and lumber mills, flourishing towns, and thriving farms. Yet when we learn that the mineral discoveries and settlements extend from the northern border away south into the Mohave country, and west into the Humboldt mountains, that the mines are yielding better than those of California, that the whole territory is believed to be rich in mineral resources, and that the whole of Oregon and Washington territories from the Rocky Mountains to the Cascade range are auriferous, we begin to realize that what we see now is but a slight foretaste of what will be hereafter.

In the great revival of the overland emigration this season, we have undoubted evidence of the newly awakened interest among the people. This, however, is but a beginning. Large numbers of the migratory thousands were from Texas, Arkansas, Missouri, and the South generally. From the particular States named we continue to receive news that the Union men generally are preparing to leave for the Pacific. They will doubtless next season swell the overland caravans to an immense extent. Many, not being able to wait till then, have fled to the Western Free States, but when the Spring opens they will go West with the swarms of fugitives.

The overland route is not now the terrible ordeal it once was. Kansas and Nebraska stretch their friendly settlements far westward, and wayside stopping places and the homes of adventurous pioneers are met with for

a hundred and fifty miles. On approaching the highlands and mountains, the flourishing mining towns of Colorado cheer the traveller, and lighten his once dreaded passage. Further along the Salt Lake towns appear, and between them and the outposts of Nevada or Humboldt the distance is but short. Along the whole route the Pony Express is met with, and the active protection of the National Government shields the wayfarers from attack by means of a convoy of troops, while the magnetic telegraph extends over the journey. Thus the great wilderness has lost many of its terrors, and is now a perfectly practicable traveling route.

The California papers are jubilant over the progress of Nevada, because it has given their farmers a new market for their grain, and the San Francisco merchants customers for their goods. As regards the latter, this connection is not likely to be soon disturbed, but the assumption that grain cannot be grown in Nevada is unfounded. It is grown in Carson Valley, and will be in all the watered valleys. In fact, the region is unexplored, and its arable soil not yet sought after, because the first settlers were drawn thither in pursuit of the precious metals. There is no doubt plenty of good grazing country on which countless thousands of sheep and cattle will be raised. Of the richness of the mineral deposits there is no reason to doubt, and the investments therein are already on the most gigantic scale.

Thus an auspicious future has suddenly broke upon those remote territories, and they are looming up before the surplus population of the Atlantic States as the land of promise. The war, however it may progress, cannot trouble them away off beyond the Rocky Mountains. We have abundant population to spare for the settlement of that region, for the war brings with it no peril to the free States, and sends population into it from the South for safety faster than it takes men away to the army. No one passing through the streets of Philadelphia now would dream of our having sent twenty-one thousand men into the field; and in fact, we could spare as many more with perfect ease. So it is all over the North. The places of those who go do not long remain vacant. Moreover all this helps to improve the times, and set prosperity again in motion. We shall rejoice, therefore, to witness next season fully as great a rush to the new gold regions as was seen in the early days of the California fever. Thirty thousand persons went overland last season, although no excitement was raised. Double or treble the number next season would not surprise us.—*North American and United States Gazette, Phila.*

THE DELAWARE RAILROAD COMPANY.—The Delaware Railroad Company held their tenth annual meeting at Dover on the 9th of Jan. Samuel M. Harrington, Sam'l M. Felton, Andrew C. Gray, Charles I. Dupont, Joseph Bringham, Jesse Sharp, Dr. Henry Ridgely, Henry B. Fiddleman, Daniel Curry, Alexander Johnson, William Cannon, William H. Ross, and Charles Wright, were elected Directors, and James F. Allee, Treasurer. From the report we learn that owing to the disturbance of times travel has fallen off, but freight has increased. The installment due from the lottery bill that should have been into the State Treasury in July, was not paid until October, and has not yet been paid to the Railroad Treasury. On the faith of the grant of this money by the State, the road extended its line beyond Seaford, with the ul-

timate intention of taking it to Annapolis. The report intimates that it would be bad policy to forfeit the lottery charter, when, on the faith of the money from it, the road had burdened itself with the extension. It also speaks of the importance of the road as a work of defence for both the shores of the Peninsula in case of war. The road to Annapolis, the report says, can be finished in ninety days. The road lies on a direct route between Fortress Monroe and New York, and had it been constructed, it would have saved the Government this year many times its cost in the conveyance of stores. It estimates that troops could be conveyed in 14 hours from New York, and 10 from Phila. to Fortress Monroe.

MONETARY AND COMMERCIAL.

There has been no very special movement in the money market during the past week. There is however a general feeling of confidence growing out of the brilliant successes of the Government forces. Capital is very abundant, and difficult to use at satisfactory rates. Good business paper is sought for at 8 to 10 per cent. Lenders complain of a scarcity of such kinds as they are willing to buy. Exchange has been moderately firm during the week. The abundance of Treasury notes keeps it, however, down to the minimum rates. Our quotations are as follows:

	Buying.	Par.	Selling.
New York, ...			$\frac{1}{2}$ prem
Philadelphia, ...			$\frac{1}{2}$ prem
Boston, ...			$\frac{1}{2}$ prem
Gold, ...	$\frac{1}{2}$ to 1 prem.		1 to 2 prem

Since the passage of the Treasury Note legal tender law, these notes have formed the standard of value. The State Bank of Indiana has redeemed its issues in these notes, and it was expected that the banks of this State also would follow the same course. It appears however, that in some instances they have declined to do so. As an act of retaliation, the banks of this city threaten to place their notes at a discount. There is considerable feeling on the part of some of the sorting houses especially on this subject, and unless the banks concede the point at issue, it is probable that we shall see the issues of Ohio banks discredited in this city. This anomaly will ill accord with the declaration made at the commencement of the general suspension, that in no case would the Ohio banks suspend specie payment. We hope that the Board of Control in their wisdom will be able to arrange the differences that have unfortunately arisen, and that good feeling may be restored between the parties at issue. The following are the quotations of par funds and uncurrent notes:

BANKABLE FUNDS OR CURRENCY AT PAR.	
Ohio,	
Bank of the State of Indiana,	
Philadelphia,	
New York City,	
Bank of Pittsburgh,	
U. S. Demand Treasury Notes,	
UNCURRENT.	
Missouri, ...	2@25 dis.
Illinois, ...	5@35 dis.
Wisconsin, ...	5@35 dis.
Iowa, ...	$\frac{1}{2}$ dis.
VIRGINIA—	
Eastern, ...	35@40 dis.
Bank of Charleston, ...	50 dis.
Wheeling City, ...	3 dis.
Branches, ...	4 dis.

PYNNIA—	
Pittsburgh, except Bank of Pittsburgh, par....	½ dis.
Interior.....	1 dis.
Louisiana.....	40 dis.
MARYLAND—	
Baltimore City.....	1 dis.
Interior.....	2 dis.
TENNESSEE—Old.....	40 @ 50 dis.
Stock, S. vent.....	40 @ 50 dis.
Unsecured.....	40 @ 50 dis.
N. & S. Carolina, Alabama and Georgia.....	40 @ 50 dis.
Indiana T'k B'ks.....	10 @ 20 dis.
Ind. Discredited B'ks.....	½ dis.
Michigan.....	1 dis.
Kentucky.....	par.
New York State.....	½ dis.
New England.....	½ dis.

The following is a notice just issued by the Collector for the Port of Cincinnati:

"Under recent instructions from the Secretary of the Treasury, and under the authority of Act of Congress, I am authorized to receive deposits of United States notes or coin, in sums of not less than \$50, on account of temporary loan to the United States, for which I will issue certificates of deposit, bearing interest at the rate of 5 per cent per annum, and payable at any time upon the holders giving ten days notice.

Full particulars will be given at the office of the United States Depositary, Custom House building, corner 4th and Vine streets.

Office open from 9 o'clock A. M. to 3 o'clock P. M. ENOCH T. CARSON,
March 21, 1862. U. S. Depositary.

The *N. Y. Economist* say:—There is a better feeling in commercial circles, and many capitalists are now seeking for investments, who have been for the last year indisposed to employ their capital in anything except call and short loans. The assurance that the rebellion has already received its death blow, and is simply prolonging a precarious existence until our armies reach the main body of rebel troops, that the immense inflation of our currency from government paper and bank issues made upon them must soon advance the price of property, and induce a period of unexampled activity in every kind of regular and speculative enterprise, are rousing up the most cautious and conservative of our capitalists to look after something in which to invest their funds at present prices. Among the business community there is a feeling that the tide has fairly turned towards prosperity. When trade is resumed with the South there will be a very large and active demand for all kinds of dry goods—particularly domestics—groceries, &c. and New York will be the market which Southern buyers will seek, and sweep from us many kinds entirely, which will tend to enhance prices temporarily.

The stock sales in New York on Tuesday were as follows:

Stocks—Dull again; Chicago and Rock Island, 56; Milwaukee and Prairie du Chien, 27½; Cleveland and Toledo, 46½; Galena and Chicago, 69; Illinois Central Scrip, 65½; Panama 121½; Michigan Central, 55½; Harlem, preferred, 31½; Harlem, 13; Hudson, 35½; Erie, preferred, 61½; Erie, 37½; American Gold, 101½; United States Sixes of '81, registered, 94½; do do, coupons, 94½; Tennessee Sixes, 58½; Virginia Sixes, 60; Missouri Sixes, 52½; Pacific Mail 98; Canton, 14. Money firm at 6½ to 7 per cent for Loans on Call; 7 per cent for prime paper. Sterling Exchange dull, at 111 to 111½ for Merchants', and 111½ to 112 for Bankers' Bills. American Gold dull at 1½ to 1½ per cent premium. California

Gold Bars firmer at 1½ to 1½ per cent premium. Government Stocks without decided change; United States Sixes, of 1861, 94 to 94½; 7 3-10ths Treasury Notes quoted at par.

TERRE HAUTE, ALTON AND ST. LOUIS R. R.—The Terre Haute, Alton and St. Louis Railroad was sold at auction on March 24, by order of the United States District Court, and bid off by Robert Bayard, S. G. Tilden and others, for the benefit of the bondholders, for the sum of \$890,000.

GENERAL TICKET AGENTS CONVENTION.—The semi-annual meeting of this convention assembled in New York last week. We have not yet been favored with a copy of their proceedings, but hope to be able to lay them before our readers next week.

ERIE RAILWAY.

Great Broad Gauge, Double Track and Telegraph Route

TO
NEW YORK, BOSTON,
AND ALL EASTERN CITIES,
CARRYING THE
Gt. Western United States] Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

feb 6. CHARLES MINOT, Gen'l Supt.

N. W. BALDWIN, MATHEW BAIRD. M. W. BALDWIN & CO. ENGINEER'S BROAD AND HAMILTON ST. Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (for fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive engines.

419 y

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANA, POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-West.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M.; Chicago at 6:00 A. M., connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front-street No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

KNOX & SHAIN, Engineering and Telegraphic INSTRUMENT MAKERS, 218 WALNUT ST., PHILADELPHIA. (Two Premiums 419 by Franklin Institute.)

OHIO & MISSISSIPPI RAILROAD. CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENT, NES, Cairo, and St. Louis.

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.

RETURNING.—Mail Train Leaves East St. Louis.—(Sunday excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M. arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office No. 5 East Third street; No. 1 Burnet House, corner of north-west corner of Front and Broadway; Spencer House Office; and at the Depot corner of Front and Mill Streets.

G. B. McLELLAN, Gen'l Superintendent.
Omnibuses call for Passengers,
Novemb 11th, 1861.

1861. 1861

FAST TIME.

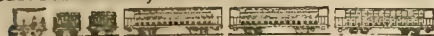
LITTLE MIAMI

(AND

COLUMBUS AND XENIA

AND

CINCINNATI, HAMILTON & DAYTON



RAILROADS.

On and after SUNDAY, Nov. 10. 1861, Trains depart as follows:

7:30 A. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenview and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad for Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Richmond, Indianapolis and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express—From Cincinnati, Hamilton and Dayton Depot—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,

General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.

Mathematical Instrument Makers

No. 67 West 6th St. bet Walnut & Vine CINCINNATI O

W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr. Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

1862. 1862.

Pennsylvania Central R.R.

285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE.
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
(with close connections from Western Cities),
ALL CONNECTING DIRECT TO NEW YORK,

THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (130 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburgh.

CLARKE & CO., Transfer Agents, Pittsburgh.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

W. W. AIRMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.

CLARKE & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

G. B. NEAL, Parkersburg, Virginia.

HALL & CO., Marietta, Ohio.

H. S. PIERCE & CO., Zanesville, Ohio.

MCDOWELL & McCOLM, Portsmouth, Ohio.

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J. P. JOHNSTON, Ripley, Ohio.

JOHN TODD, Covington, Ky.

G. L. HEATON, Cleveland, Ohio.

R. C. MELDRUM, General Traveling Agent for the

South and West.

LIVE STOCK.

Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Allentown, Pa.

L. L. HOEPT, Gen'l Ticket Agent, Philadelphia.

H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

BUSH & LOBDELL.
Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,
MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS,

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the
Most Reasonable Terms.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

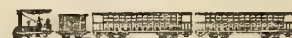
OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET
NEW YORK.

ALBERT BRIDGES.

JOEL C. LANE

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

through Distance 280 Miles;

42 Miles Shorter than any other Route

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M., 3:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; west side of Vine street, between the Post-office and the Burnet House; No. 5 East Third-street; No. 169 Walnut street; Sixth street Depot.

Freight trains leave at 6:00 P. M. and run directly brought to Chicago without re-billing or transhipment.

JOHN BRANT, Jr., Superintendent.

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent.

Burnet House, Cincinnati, O.

W. M. F. HEWSON,
STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and makes collection

LOW'S RAILWAY DIRECTORY FOR 1861

CONTAINING
THE NAMES AND RESIDENCES
OF THE
PRESIDENTS, DIRECTORS
AND
OFFICERS
OF ALL THE RAILROADS IN THE
UNITED STATES

they could be ascertained.
Published by James W. Low.
Price one dollar.
Sent postage prepaid by mail for one dollar
and twenty cents.
A few copies only for sale at the office
the Railroad Record,

WRIGHTSON & CO. 167 Walnut Street.

J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,

my21

CINCINNATI

**McCALLUM, BRISTOL & CO.,
BRIDGE & DEPOT BUILDERS.**

McCallum, Bristol & Co., are prepared to construct
**McCALLUM'S PATENT INFLEXIBLE ARCH
TRUSS BRIDGE**, for Railroad and Highway purposes
at any point in Ohio, Indiana, Illinois, Missouri, Iowa,
Wisconsin and Minnesota on as favorable terms as any
other bridge and in the most approved and perfect
manner. Parties designing information, will please
apply to the firm at their Office 99 Third St., Cincinnati,
or to McCallum, Seymour & Hawley, No. 110 Broad-
way, N. Y. Ag. 26.

**MIDDLETON & STROBRIDGE,
LITHOGRAPHERS AND ENGRAVERS,**

Walnut St., CINCINNATI.

Special attention given to all kind of work in our line,
such as Show Cards in one or more colors, Maps, Bonds,
Portraits, Certificates of Stock, &c., &c.

CONTRACTS for Rails at a fixed price, or on com-
mission, delivered at an English port, or at a por-
United States, will be made by the undersigned
THEODORE DEBON,
101 10 Wal Broadway, New York

EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



**LOCOMOTIVE & RAILROAD
CAR SPRING**

MANUFACTURER,
WILMINGTON, DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a good, low-priced FAMILY
MACHINE, have introduced a *new style*, working upon the
same principle, and making the same stitch, though not so
highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALL ON
BOTH SIDES, impossible to unravel, and leaving no chain or
ridge on the under side, the economy of thread, and adap-
tability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

Send or call for a circular, containing all particu-
lars, prices, testimonials, etc.
Feb 12.

WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON

ARCH BRIDGES

—AND—

Corrugated Iron Roofs

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly
on hand, painted, and ready for shipment, with
instructions for applying them. Give us your orders at
No. 66 West Third Street, Cincinnati, Ohio.
Spt. 2.

MOSELEY & CO.

**JAMES FOSTER, Jr. & CO.,
MATHEMATICAL AND PHILOSOPHIC-
AL INSTRUMENT MAKERS,**

S. W. CORNER FIFTH AND RACE,

Cincinnati Ohio.

Drawing Instruments, Scales of all kinds, Barome-
ters, Thermometers, Spectacles, Microscopes, etc., al-
ways on hand. Repairing attended to.

H. TWITCHELL.

JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.,
Pennsylvania, are prepared to execute orders for Street and
other Rails on terms favorable to parties wanting to pur-
chase Ag. 4, m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods,

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron
hammered. The whole operation from ore to finished Iron
is conducted at our own Works June 9.

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness
the best and latest improved

COAL OR WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works being located on the New York Central
Railroad, near the center of the State, possess superior
facilities for forwarding their work to any part of the coun-
try, without delay.

JOHN ELLIS, President.

WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

**Lap-Welded American Charcoal Iron Boiler
Flues**—from 1 1/4 to 10 inches outside diameter, cu-
to definite lengths.

Wrought Iron Welded Tubes—from 1/4 inch to
8 inches inside diameter, with screw and socket con-
nections, for Steam, Gas Water, or other purposes, and fit-
tings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong
and durable, designed especial for Water purposes.

Cast Iron Gas or Water Pipe—1/4 to 24 inches
diameter, and branches for same, &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS, CHAS WHEELER,
THOS. T. TASKER, JR., S. F. M. TASKER,
HY. G. MORRIS.

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MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

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In use by 10,000 Merchants, Bankers and Railroad offices
of the South and West. For sale by 1,000 leading Station-
ers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, APRIL 3, 1862.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.
—••—
SUBSCRIPTIONS—\$3 Per Annum, in Advance.
—••—

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A square the space occupied by ten lines of Nonpareil.
On square, single insertion..... \$1 00
“ “ per month..... 3 00
“ “ six months..... 12 00
“ “ per annum..... 20 00
“ column, single insertion..... 5 00
“ “ per month..... 10 00
“ “ six months..... 40 00
“ “ per annum..... 80 00
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“ “ six months..... 110 00
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Card not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the Record.

If Railroad officers will place us under obligations if they will forward promptly to this office the Annual Reports, Monthly Statements, and such other matters as they may deem worthy of publication.

Subscribers in Great Britain, 13s. 6d. (\$3 payable in advance.

Arrival and Departure of Trains.

	Depart.	Arrive.
Cincinnati, Hamilton & Dayton—		
Logansport & Chicago Express.....	7.30 A. M.	9.15 P. M.
1st R. I. C. T. & Sand. Mail.....	7.30 A. M.	5.45 P. M.
Dayton & Toledo.....	7.30 A. M.	9.15 P. M.
2nd. Ham. Accommodation.....	9.40 A. M.	8.10 A. M.
3rd. Richmond, Day. & Bell'n Ex.....	3.30 P. M.	9.15 P. M.
4th Dayton, Tol. & Detroit Ex.....	5.30 P. M.	11.25 A. M.
Logansport and Chicago Express.....	7.30 P. M.	8.10 P. M.
Glendale Accommodation.....	7.30 P. M.	7.00 A. M.
6th Columbus Express.....	10.00 P. M.	7.40 A. M.
Little Miami—		
Morrow Accommodation.....	7.40 A. M.	1.30 P. M.
2d Day Express.....	9.45 A. M.	6.50 P. M.
Camp Dennison Accommodation.....	3.15 A. M.	6.10 P. M.
3d. Columbus Accommodation.....	4.00 P. M.	10.31 A. M.
4th. Xenia Accommodation.....	5.50 P. M.	8.00 A. M.
Marietta & Cincinnati—		
1st Mail Express.....	8.10 A. M.	10.05 A. M.
2d. Accommodation.....	3.30 P. M.	5.45 P. M.
Cincinnati, Wilmington and Zanesville—		
1st Mail Express.....	9.45 A. M.	8.00 A. M.
2d. Accommodation.....	5.50 P. M.	6.45 P. M.
Ohio & Mississippi—		
1st Mail Train.....	7.00 A. M.	10.05 P. M.
2d. Aurora Accommodation.....	3.15 P. M.	7.55 A. M.
3d. Express Train.....	7.20 P. M.	8.25 A. M.
Indianapolis & Cincinnati—		
1st. Mail.....	5.50 A. M.	9.45 A. M.
2d. Accommodation.....	2.45 P. M.	5.10 P. M.
3d. Chicago Express.....	5.00 P. M.	12.20 A. M.
Antietam Central—		
1st. Express.....	6.38 A. M.	10.44 A. M.
2d. Accommodation.....	2.24 P. M.	7.10 P. M.
Cincinnati & Chicago Air Line—		
1. Mail.....	7.30 A. M.	9.15 A. M.

BALTIMORE & OHIO R. R.

This road is now open all the way from Wheeling to Baltimore. From a dispatch from the officers at Baltimore to the General Ticket Agent here, we learn that trains have begun running on regular time, and that the entire line is now amply protected. The embargo which has so long been laid on this great national thoroughfare by the ruthless hand of war has produced practical conviction of its importance to the trade of the whole country and especially to that of the Ohio Valley. To this extensive and important section it affords the shortest and most natural outlet to the ocean, the nearest route to which its products can reach the seaboard, and the great commercial marts for exportation. The closing of this avenue therefore must be severely felt by all interested. That it has been closed for so great a length of time has been a great misfortune not only to the company which controls it, but also to the vast number of people who have hitherto depended upon it for the transportation of their products. The universal joy upon its re opening can only be appreciated by being seen.

ILLINOIS CENTRAL RAILROAD COMPANY.

REPORT TO THE SHAREHOLDERS.—At a meeting of the Board of Directors of the Illinois Central Railroad Company, held at their office in the city of New York, the 5th day of Feb. 1862, it was

“Resolved, That the general statement, dated 28th January, be submitted to the shareholders in advance of their annual meeting the last Wednesday in May next.”

The favorable condition of your property in the early months of last year arose largely from the through traffic with the South. The result of the completion of the connecting lines with Mobile and New Orleans, during the previous year, gave promise of a surplus beyond the interest of the debt, to provide a dividend on the share capital.

The net profits of the first quarter's traffic were \$354,718 96, the land sales and collections were alike satisfactory and we feel justified in the belief that the difficulties which had attended our enterprise had been surmounted. These expectations were disappointed by the extension of the Southern difficulties to the Middle States.

The Government placed a force at Cairo in April. Communication with the South being prohibited, our through business was cut off—the freight traffic at Cairo, from \$117,000 per month the first four months, decreased to \$103,122.18 for the entire eight months following. Our interests suffered both in the loss of business, (the transportation to Cairo having fallen off from 92,000 tons in the first four months to 20,000 tons in the last eight months,) and in the lack of ability of the far-

mers upon our line to meet their engagements in consequence of the loss of their usual market. Our line for 253 miles south of the Terre Haute and Alton road is now mainly of use for the transportation of Government troops and stores, and must remain so until the settlement of our national troubles. With the very abundant harvest of wheat and corn, the local traffic of our line north of the point named would have supported the entire road, with ordinary market prices for the products of the country, but the surplus crops of the Northwest were thrown on the lakes; the supply of vessels and canal boats was inadequate to the sudden unexampled demand for transportation, which consequently rose rapidly in price and reduced the net price of his products to the Illinois farmer to so low a point as to leave no margin for profit.

The bank issues in this State were largely based upon the securities of the Southern States. The overthrow of this currency caused the withdrawal of \$12,000,000 of paper in circulation with great loss to the holders, thus adding to the general confusion caused by the unexpected war which has transferred in Illinois alone 65,000 men to warlike pursuits from the ordinary occupations of civil life.

In this state of things our first effort was to reduce the expenses; secondly to secure grain from the purchasers of lands, in payment of their contracts.

The working expenses from the 1st of January to the 1st of July were \$817,890 86; from the first of July to the 31st of December, 687,063 01; the expenditures on capital account, including \$64,487 62 for one engine and sixty three cars (constructed early in the year) are 296,597 31.

We have contracted for two iron bridges to be delivered this year, and shall construct a new bridge at Chicago, but the entire expense for capital account should not exceed \$150,000, and the working expenses, \$1,450,000.

Receipts of grain for lands were commenced in August, and 1,860,000 bushels of corn were delivered and shipped through to New York for sale—the first shipments at a small profit. The great advance in lake and canal freights not only cut off this profit, but will produce a loss, which however will be compensated in some measure by the purchase of the construction bonds at a discount. We are now taking corn in the ear, and have already 300,000 bushels stored near Chicago. From 10,000 to 15,000 bushels are sent in daily: and this appears to be the most practical method in these hard times for the western farmer of meeting his desire to pay his debts, and securing to the Company partial payments of the large amount of notes it has on hand.

The road forwarded during the past year fifty per cent more grain than in 1860, and five times as much as the total of 1855. Fifteen millions of bushels in twelve months is the most striking proof of the rapid develop-

ment of the prairies; and now, with the necessities growing out of the war, *Sorghum* (or Chinese Sugar Cane,) is successfully cultivated; some 1,500,000 gallons were produced last year; and the cultivation of cotton in Southern Illinois will be resumed if seed can be obtained—the culture of cotton was not abandoned until the price of upland declined below ten cents per pound; at this price it is generally believed that it can be grown profitably, and to a large extent. Three-fourths of the citizens of Southern Illinois originated from the Southern States, and are familiar with its culture. The agricultural department of the General Government has taken steps to secure a supply of seed.

Illinois has eight or ten millions acres of land, with the climate of Virginia and Kentucky, and will furnish, should the national troubles continue, large supplies of tobacco, besides other semi-tropical products. At no period has this State occupied so prominent a position in the public mind, its immense shipments of grain, cattle and provisions controlling the prices in the Eastern markets. Even during these winter months, the sale of cattle, provisions, etc., is said to exceed one million dollars per week. The troubles and losses incident to the war must turn the attention more directly to these cheap and fertile lands, and concentrate population upon them.

Revenue of the Present Year.—It would be unjust to the distant owners of this property to shrink from an expression of apprehension in regard to the income this year, especially from passenger traffic, so long as the Southern insurrection continues. The gross passenger receipts in 1861 were only \$661,392.71, being less than the receipts of 1855, and \$451,009 less than the receipts of 1856.

The War Department has agreed to allow the actual expense of transporting troops, but the major part of this service, \$207,128.64 performed in 1861, is still unpaid. The first quarter will show a large decrease in freight earnings, for there is no way to recover the loss of business at Cairo, and while our communications with the South are cut off, we can not escape the inevitable consequences of loss and uncertainty.

The unexpected intervention of special causes has arrested the prosperity of the company, at the moment when it seemed upon the most secure footing. It is beyond individual power to re-establish it until the relations with the South are renewed, or until higher prices for the produce of the country place our farmers in better circumstances.

The construction bond debt has been reduced by cancelling \$340,000 during 1861, to \$14,913,500. The amount of land notes on hand is \$11,998,668.50, and there are 1,358,549 acres of land still unsold.

At the annual meeting the last Wednesday in May, the election of directors in place

of two whose term of service expires, and of one to fill a vacancy, will be acted upon.

Chicago, 28th Jan., 1862

W. H. OSBORN, President.

CLEVELAND AND PITTSBURGH R. R.

The annual report of the Directors of this Company, a portion of which was laid before our readers in our last number, contains many details of the business of the year, from which we extract such things as we deem of interest to our readers and the public:

The report contains a very elaborate table of passengers, both local and through, that have traveled over the road during the past year. From this it appears that the total number of local passengers carried on the road during the year was 216,789, the receipts from whom were \$225,837.90, and their mileage was 8,041,593. The rate charged per mile was 2.808 cents. The total number of through passengers was 50,493½, from whom the company earned \$73,037.61, and their mileage was 3,158,880. The average rate per mile was 2.312 cents. The road has transported 30,429 troops whose mileage was 3,523,439, from which the company received \$78,060.97—at an average rate of 2.215 cents per mile.

The stations from which the largest amount of local traffic was derived, were Cleveland, Ravenna, Alliance Wellsville, Smith's Ferry, Pittsburgh, Steubenville, Bridgeport and Bellair. The through passengers were derived from Cleveland and Bellair. The number of through passengers going east from Cleveland was nearly double that of through passengers going west from Pittsburgh. Of the connections of this road, the largest number of passengers came from the Central Ohio, Cleveland, Zanesville & Cincinnati, Little Miami and Pennsylvania Railroads.

During the whole year there has been no collision upon the road, no destruction of cars and locomotives, and no loss of life among passengers. As the total mileage of passengers upon the road was 14,723,912 it would seem to be a fair inference from the experience of this road during the past year, that a railroad traveler may expect to travel at least 14,723,912 miles before he may reasonably look for a serious accident. This fact will undoubtedly be a consolation to nervous persons who are in the habit of executing their wills before taking a short journey.

In the report of the Master Machinist is given a full detail of the performance of 42 locomotive engines. The total of miles run by these 42 engines was 800,525, or an average of 19,060 miles per engine, which would be a little over 60 miles per day per each locomotive. In doing this there were consumed 7,412½ gallons of lubricating oil, 12,093½ lbs of waste, and 17,400 lbs of tallow, costing in all for these three items \$6,322.70—or an average of 0.78 cents per mile run. The total

cost of repairs of engines was \$41,096.14, or an average of 5.13 cents per mile. The number of cords of wood consumed was 21,386, and the number of tons of coal was 15,521. The total cost of fuel for the year was \$51,220.86, or an average of 6.39 cents per mile. The total cost per mile run for the three items above enumerated was \$98,639.70 or an average of 12.32 cents per mile.

We find in the report also another item of great interest, but which is rarely given. We refer to the amount of useful load and dead weight carried. This account is not reported for all the engines, but it is reported of a sufficient number to give a very fair average. The sum total of useful load for the engines reported was 41,891,329 tons carried one mile, and of dead weight was 49,654,501. From which it appears that for every ton of useful load transported, there was also transported about one and one fifth tons of dead weight. This is a subject which is beginning deservedly to attract the attention of railroad managers, and one which should be closely investigated. As every ton carried over the road beats off some of the surface, it is a serious question to reduce the amount of dead weight to the lowest point consistent with safety. There is one other item given in the report which may be of interest. The total mileage of cars on the road for the year was 8,316,159. This gives a cost of 1.18 per car per mile, that is for the items given above.

The statistics given above are of great interest to managers, and if carefully kept form important data in the history of railroads as a science. We would suggest that it would be well to embrace in the tables the additional items of salaries, and repairs of roadway and track. This would give the total cost of running.

DETROIT AND MILWAUKEE R. R.

The following is an extract from the Annual Report of the Directors of this Company:

The liabilities of the company on December 31, 1861, were as follows:

Bills payable.....	\$365,099.29
Coupons outstanding.....	28,394.12
Balance due by the company.....	58,485.91
	351,919.32
Less the balance in bankers' hands, and traffic debt due to the Company, including a large amount due by the United States Government for the carriage of troops &c.	191,359.59

The traffic is now nearly double what it was at the corresponding period of last year, and as there seems every prospect of its continuing good it would seem to be a safe estimate to say that by May 15, after paying the accruing interest on the "Funded Coupon," the "Detroit and Pontiac," and the "Oakland and Ottawa" bonds, that the amount of floating debt ordered by the court to paid in cash will be reduced to \$150,000.

The position of the company on the 15th

of May, 1852, will then be in round figures as follows:

Balance of debt ordered by the court to be paid in cash.....	\$150,000
Engineer's estimate to complete blasting &c....	50,740
River front mortgages.....	102,679
	\$303,379

To this must be added \$50,000 to perfect the harbor of Grand Haven, and to include all contingencies that may rise, the whole amount is placed at \$400,000

The cost of the line, on the 15th of May, 1862, will stand at about \$7,000,000 and with the liabilities and expenditures as just stated may be called in round figures, \$7,400,000. For this the company will possess 189 miles of well built railway, which can be cheaply worked—a fair amount of rolling stock, stations and sidings sufficient for a considerable increased traffic—and two powerful steamers on Lake Michigan, expressly built for the requirements of the line, besides an interest in a ferry on the Detroit river.

The net revenue for the year 1861, notwithstanding the adverse circumstances already mentioned, of the civil war in American and the great freshet in Grand River, amounted to \$318,264.

The interest charges for that year were as follows:

On Detroit and Pontiac bonds.....	\$40,000	paid
On Oakland and Ottawa ".....	12,722	paid
On 1st D. & M. Mortgage bonds.....	171,750	
On 2nd do do do.....	70,840	funded
On funded Coupons.....	9,624	
On funded Coupons.....	16,604	paid
	330,640	
Difference.....	12,366	

The traffic for the month of January, 1862, is nearly double that of the corresponding month last year, whilst the expenses are not materially larger.

NEW YORK AND ERIE R. R.

STATEMENT OF THE RECEIVER.

The New York and Erie Railroad Company having previously failed to pay at maturity the coupons on the First, Fourth and Fifth Mortgage Bonds, and no provision having been made for the payment of the coupons on the Second and Third Mortgage Bonds, soon to become due; and being unable to provide for the payment of a large amount of the unsecured Bonds which had become due by reason of the failure to pay the interest on them, and having other liabilities which it was not able to discharge; the Trustees of the Fourth Mortgage, on the 2d of August, 1859, at the request of certain holders, represented to the Supreme Court that the Company was in a condition of insolvency, and that the mortgaged premises were a scanty security for the mortgage debt, and that the proceeds and profits of the property were likely to be diverted from the proper payment of the interest on the mortgages, and applied to the Court for the appointment of a Receiver of all the effects, property and franchises of the

Company, with power to run and operate the railroad while proceedings for the foreclosure of the mortgages were pending. The application was granted, and a Receiver was appointed, who, having given the required security, entered upon his duties on the 16th of August, 1859. By subsequent orders of Court, his receivership was extended to the Second, Third and Fifth Mortgages, and he was vested with the like authority by the Courts of Pennsylvania and New Jersey over the property of the Company lying in those States. These proceedings were concurred in by the Board of Directors and the representatives of the unsecured bonds.

The order of the Supreme Court appointing the Receiver placed him in possession of the railroad, and of all the real and personal property of the Company, and its powers and franchises.

* * * * *

On taking possession of his trust, the Receiver found the affairs of the Company greatly embarrassed. The income of the road, owing to the depressed state of business generally, and other causes, was barely sufficient to defray the current expenses, while claims for labor and supplies, and judgments rendered before his appointment, and rents and unpaid taxes, were pressing for immediate payment. These claims amounted to more than \$700,000. The forbearance of the creditors, and especially of the employees, whose pay was some months in arrears, and the cordial co-operation and aid of the board of Directors, relieved the Receiver from serious embarrassment; and increased earnings enabled him, in the course of four months after his appointment, to discharge all these claims, and pay the current expenses of the road. Since that time all payments for labor have been made regularly as they became due, and all supplies of the past year were purchased for cash.

The sums due for supplies purchased and labor performed before the appointment of the Receiver, with rents and taxes unpaid, and certain other claims and judgments which he was ordered to pay

Amount to.....	\$741,510 14
Interest on 4th mortgage, due April 1859, unpaid.....	62,195 60
Interest on 1st mortgage, due May 1859, unpaid.....	102,270 00
Interest on 5th mortgage, due June 1859, unpaid.....	31,027 50
Interest on 2d and 3d mortgages due September 1, 1859.....	350,002 00
Amounting in all to.....	\$1,287,005 64

The payment of this large sum out of the earnings of the road, and provision for payment of the interest in future on the mortgage debt, would have extended the term of the Receiver longer than was contemplated at the time of his appointment; and the uncertainty about the amount of the earnings of the road that could be applied to the payment of mortgage interest, and the unwillingness of some of the second mortgage bondholders, whose bonds were past due, to grant any extension, led to an arrangement between the stockholders and creditors for maintaining

the mortgage securities, unsecured bonds, and capital stock of the Company. Messrs Dudley S. Gregory and J. C. B. Davis were appointed Trustees under this arrangement, and to their zealous discharge of the onerous duties of the trust it is mainly owing that the interest of all parties have been preserved, and this valuable property saved from the ruinous affects of a protracted litigation.

The report of these Trustees will be found appended to this statement. Reference to it will show that, by contribution of coupons on mortgage bonds and cash by the bond and stockholders, the Receiver was relieved from the payment of so much of the mortgage interest that he was able, in the course of a few months, to pay of all the arrears of labor and supplies, and resume regular payment of interest on the first and second mortgage bonds, and subsequently to pay a large amount of arrears of interest on the third, fourth and fifth mortgages, whose holders declined to come into the arrangement, as well as to pay the current interest on these bonds as it became due. The last of these payments was made in December, 1861. On representation of the fact to the Court, and with the consent of all parties in interest, the Receiver was authorized to convey all the property of in his possession to the new company, which was done on the 31st day of December.

RECEIPTS AND DISBURSEMENTS.

From Aug. 16, 1859, to Dec. 31, '61 the cash receipts from all sources were.....	\$19,331,279 14
And the disbursements, including amount deposited for interest, and not called for to Dec. 31.....	18,845,234 46
Leaving a balance of.....	486,044 68
From which deduct expenses for Dec., paid in Jan., and included in the following statement.....	301,592 91
Leaving a balance of.....	181,451 77

EARNINGS AND EXPENSES.

The earnings of the road for the same time were.....	\$13,607,132 10
Expenses incurred prior to Aug. 16, 1859, paid since.....	\$741,510 14
Expenses of operating road to Dec. 31 1861.....	8,230,318 92
Rents and taxes.....	527,343 24
Rent of Long Dock property.....	287,794 92
Expenses of foreclosure, paid by order of court.....	64,756 17
Expenses of receivership paid by order of court.....	55,150 22
Construction expenses.....	567,132 12
Interest on mortgage bonds.....	2,871,115 17
Buffalo branch.....	30,560 41
Pavonia ferry.....	8,105 27
Excess of material and fuel.....	41,763 35
	13,425,690 33
Balance as above.....	\$181,451 77

The expenses of operating the road, the purchase of supplies, and all claims and balances against the Receiver to Dec. 31, as far as ascertained, are included in the above statement.

A table showing the earnings and expenses in detail will be found appended to this statement. Other tables, showing the comparative earnings and expenses for several years, the items composing the construction account, materials on hand, and materials used in repairs, are also added. As the transportation accounts are, according to law, made up each year to the 30 of September, the table

appended to this statement does not include the last three months of the Receivership, while a small portion of his term embraced in the statement for the year ending September 30, 1859.

The three months ending Dec. 31, 1861, produced a larger revenue than the road ever earned in the same length of time. The gross earnings were:

October.....	\$718,925 18
November.....	831,970 13
December.....	700,794 99

The Receiver was appointed by the Court, after a full hearing of all the parties in interest; and his duties were defined, as far as possible, in the order of his appointment. But in numerous instances it has been necessary for the Receiver to apply to court for additional powers, and for instructions in reference to the manner of executing those already given him. All these applications have been made on notice to all the parties in interest; and before the court acted on such applications, all such parties who desired were heard by the Court, and it is believed that in no instance has the Court made an order to which any party, after fully understanding the grounds and reasons of the Receiver's application has continued any opposition. At short intervals from the date of the Receiver's appointment, his receipts, disbursements and accounts, together with all his acts and doings as Receiver, have been subjected to a full and careful examination, by an experienced officer appointed by the Supreme Court; and of such examinations, the several parties have had, in every instance, full notice in writing, and have attended them personally or by their attorneys and counsel, when all the Receiver's books and papers, and agents were open to inspection and examination, and were examined by all who chose to do so. And on all those repeated occasions his accounts and management as Receiver have been approved, and thereafter adjudged, confirmed, and established by the Court. While the undersigned does not suppose his management of the great and complicated interests committed to his charge has been by any means free from fault, he does hope that the opportunity, thus given to all their complaints before the Court, at the proper time, when he was prepared to explain his policy and conduct, and the general approbation of those who have had the best means of judging their merits, may justify him in not expecting serious disapprobation from others, and relieve him of all fears of their ultimate judgment upon his management. It may be proper to add that the whole property has passed from his hands, and that he has been finally discharged of all further duty and responsibility, by order of Court, save in respect of some money he was directed to hold to pay certain coupons and to discharge his remaining liabilities on certain outstanding contracts and claims; and this

remaining trust will very soon be ended, when without further action on the part of the undersigned, his relations, duties, powers and responsibility, as Receiver, will be entirely terminated.

* * * * *

EXPENSES.

The expenditures for the repairs of the road and machinery have been large though somewhat less than the average of the 3 years preceding. It has been the aim of the Receiver to put and keep the track and road-bed in good condition, and he believes he has succeeded in doing so. During his term 23,514 tons of new rails, equal to more than 230 miles, have been laid, and 956,000 new cross-ties placed in the track. The machinery and cars have been fully kept. The efficiency of the motive power has been considerably increased by the rebuilding of the older locomotives, and extensively repairing others. Twenty have been adapted to coal burning, with a large saving in the cost of fuel. The cars are in better condition than for several years. A large number of freight cars have been rebuilt, and are now worth more than when originally put on the road.

The expenses of operating the road the current year will be less in proportion to the earnings than they have been the last two years, though the occurrence of two disastrous floods, one in September, on the Western Division, and the other in November, on the Eastern Division, added materially to the expenses of the first three months.

In comparing the expenses of the last two years, it will be seen by reference to the table that the value of materials on hand is \$41,793 35 more than when the Receiver took possession of the road, which excess should be fairly credited to expenses.

CONSTRUCTION EXPENSES.

The sum of \$567,232 12 has been charged to construction account in two years four and a half months.

Of this, \$59,207 51 was expended on the Cascade embankment. The work was commenced by the old company, and its completion was required by considerations of safety and economy.

For ferry slips, ferry-houses and boats for the Pavonia Ferry, \$62,698 has been expended. For new depot building and necessary tracks at Paterson, and grading of the grounds, \$29,861. This expenditure was necessary in consequence of the land on which the old depot stood having been sold, and there being no proper facilities for the accommodation of the large business of Paterson at the new station. For land and fences \$14,913 75 has been paid. The larger part of this sum has been paid by order of Court for lands not previously paid for, though occupied by the road.

The expenditure of \$67,151 12 for machine and workshops, machinery in shops, depots

and water stations, has mainly been caused by the transfer of the business from Piermont and Jersey City to Long Dock, and the large increase of freight traffic. For new side tracks and switches at Long Dock and other places on the road, required by the increase of business and the change of terminus, about \$25,000 have been expended.

A very considerable portion of the track, particularly on the Delaware Division, had never been ballasted, mainly on account of the want of proper materials. During the Receivership much of the unfinished portions of the track on that Division have been ballasted in the most thorough manner with broken stone and gravel. Where this has been done the expense of ballasting has been charged in current expenses. Four new locomotives have been added to the equipment, and the cost charged to construction. More than enough to cover depreciation has been added to the value of the whole rolling stock, by rebuilding engines and cars, the whole cost of which has been charged to expenses. About seven hundred freight cars have been rebuilt in the best manner, and made capable of carrying more tonnage than when new. The track, rolling stock and structures are believed to be in better condition than they have been at any time since the opening of the road.

LONG DOCK.

Any doubts that may have existed as to the wisdom of the purchase of the Long Dock property, and to the expediency of the large expenditure required to bring it into use, the experience of the last few months has completely dispelled. In May last the works had so far progressed that some of the passenger trains were run through the tunnel to the new ferry, and in October all the passenger trains commenced running there. A portion of the freight which had heretofore gone to Jersey City was transferred to the Long Dock, and as facilities were furnished, the quantity of freight sent there was increased till about the last of December, the whole business, freight and passenger, was concentrated there, and no trains, except a local passenger train, have since been run to Piermont. The Receiver is not prepared to state in detail the value of this terminus; but he has no hesitation in saying that the earnings of the road since October have been \$100,000 more per month than they would have been without it. The expense of handling and delivering freight are much less than they were when the freight trains ran to Piermont; and greater dispatch is given both to eastward and westward bound freight.

The Receiver is not able to make any exhibit, in figures, of the advantages of the new terminus, as it has been in use for a short time; but he has no hesitation in expressing the opinion that the saving of expenses over the cost of doing the same amount of business at the old terminus, and the profits of the

ferry, will pay the interest on the whole outlay on the Long Dock property.

PAVONIA FERRY.

The charter of the Long Dock Company authorized, so far as the laws of New Jersey could do so, the establishment of a ferry from their property to New York; and a lease having been procured from the city of New York, the Receiver established, about the first of May last, a regular ferry between the Long Dock property, at the foot of Pavonia avenue, and the Erie railroad Depot in New York, at the foot of Chambers street, immediately opposite the general offices of the Company.

At first the service was performed by one boat, making trips each half hour; but soon after another boat was added, and the trips are now made regularly every fifteen minutes.

The expenses of the ferry have been comparatively large on account of the services being performed for the first four months by chartered boats. Two boats have since been purchased, and a new and very superior boat has been built, and will soon be placed on the ferry. The earnings of the ferry have exceeded the expectations, and have nearly covered the current expenses. With the increase of population and business on and around the Long Dock, this ferry can not fail to become a source of considerable revenue, and at the same time increase the value of the real estate of the Long Dock Company. The convenience and comfort of the passengers, and greater regularity in running the trains, have been secured by the establishment of the ferry, and the want of suitable station accommodation in New York has been supplied by spacious and well arranged ticket offices, passenger and baggage rooms. The cost of these improvements, and of the ferry slips, and other necessary fixtures in New York, has been paid by the Receiver, and charged to account of construction.

BUFFALO BRANCH.

This road, extending from the main line at Hornellsville sixty miles to Attica, and thirty miles from Buffalo, was purchased at foreclosure sale by the trustees, Messrs. Gregory and Davis, at the request of the Directors of the Erie Railway Company, and the Receiver was authorized to operate it until the re-organization of the Company was completed. The road has been put in good repair, with a line of telegraph, and other improvements, and arrangements made with the Buffalo, New York and Erie Railroad Company, owning the road from Attica to Buffalo, to run passenger and freight trains in connection with the main line between New York and Buffalo. This enables the trains of the Erie Railway to make close connections with the trains of the Buffalo and Lake Huron, the Grand Trunk and Great Western Railways of Canada, and their connections in the Northwestern States. Through this branch the Erie Railroad con-

trols the shortest line between New York and Buffalo, and will be able to command a considerable portion of the traffic between the two cities.

In the organization and general management of the road no material changes were made by the Receiver. The employees of the old Company were retained, and the rules and regulations continued in force, modified only from time to time as circumstances required. The new Company has also retained the employees and adopted the rules and regulations of the Receiver. In this way the road has suffered none of the evils which often follow changes of administration.

In closing the active duties of his trust, the Receiver takes the liberty of congratulating the stockholders that their property has been returned to them in as good condition as when it came into his hands; that the interest on the whole debt has been provided for, and the current interest punctually paid; and that the Directors have assumed the management of the road under circumstances more favorable than have ever existed in its history. The Receiver had money on hand to pay all the expenses of operating the road, including rents and taxes to the 1st of January, besides a considerable surplus to be applied under the direction of the Court, to the payment of the interest on the mortgage bonds as it becomes due. With the ability to earn more income than ever before, it is hoped the early return of peace and prosperity to the country will so increase the traffic that the road will hereafter earn full interest on the entire capital and debt of the Company.

NATHANIEL MARSH, *Receiver,*
New York, March, 1862.

ELECTRICITY IN THE MANUFACTURE OF IRON.

Some very interesting experiments have recently been made at the works of the Pennsylvania Iron Company, on the practicability of employing electricity in the manufacture of refined iron. These experiments are conducted by Prof. Fluor and Mr. Adams. The mode of operating is thus described by the *Philadelphia Ledger*:

The electricity is generated by a powerful magneto electric machine making some five hundred revolutions per minute; large copper wire helices revolving before twenty powerful magnets. This machine furnishes the primary current and passes through a Ruhmkorff's induction coil of large size, from which the secondary current is led into the puddling furnaces. When the iron boils up, the tube containing the salt is connected with one of the wires and stirred into the iron. A great change seems to take place at this stage of the process. The iron froths up, and after a few minutes becomes a cellular mass. The impurities leave the iron in a gaseous condition, and the metal produced is of a very fine

fibrous texture. We were shown some pieces, which were so strong that they could not be broken even with the largest sledge hammer and bent up to a circle. This process will do great service in the working of bad iron, and we are fully confident, that the rails made of this refined iron will be soon in great demand. We have also seen some fine magnetic steel samples produced in a similar manner, which seems to us in no way different to the best English steel we have seen in Europe. We learn also, that a new system of working the iron from the ore will soon be introduced on a large scale at these works, and they will thereby be enabled to manufacture iron of superior quality. Electricity seems to work its way with truly telegraphic speed into all the prominent manufacturing branches of the country.

CAST STEEL AND ITS MANUFACTURE.

We republish by request the following essay on the manufacture of cast steel by Mr. Henry Bessemer of London, England. It was delivered before the Institute of Mechanical Engineers in July last. Mr. Bessemer is well known in the manufacturing world as a successful maker of iron and steel, and his remarks on cast steel will be read with interest by all who feel the slightest concern about this indispensable article of modern manufacturers:

"The mode of manufacturing cast steel, which now forms so important a branch of the Sheffield trade, was discovered in the year 1740 by Mr. Benjamin Huntsman, of Handsworth, near Sheffield who subsequently established steel works at Attercliffe, where his invention has ever since been successfully carried on. In its early stages many difficulties had, however, to be overcome. Materials for lining the furnaces and for making the crucibles had to be sought for and tested; the peculiar marks of iron most suitable for melting had to be determined on by numerous experimental trials; and such was the difficulty at that time of making crucibles which would stand the excessive heat of melted steel, that for a long period only very highly carbonized or "double converted" steel, which required the lowest temperature, could be successfully melted. The first products of a new manufacture, even while the invention still remains in a partially developed state, but too frequently stamp its subsequent character. Thus Huntsman's cast steel, although it was acknowledged to be a pure homogeneous metal of great value for certain purposes was still looked upon as a hard and brittle material of very limited use, not bearing a high temperature without falling to pieces, and quite incapable of being welded; even within the last few years this has been the popular idea of cast steel. Improvements in its manufacture have, however, from time to time been introduced, and steel of a milder and less brittle character has long been made, capable of welding with facility, and working at a high temperature without falling to pieces. Its uses have consequently been greatly extended, and the employment of cast steel for the best cutlery and edge-tools has now become universal; in-

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N. Y. & Pa.		48	\$											
Baltimore and Ohio.....	Md.		380	13,111,800	10,781,833	566,070	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do										"	2,500,000	6		1885	
do do										"	700,000	6		1880	
do do										"	1,124,500	6		1875	
do Washington Branch.....	Md.		30	1,650,000	1,256,750	139,120	314,090	8,795	Dec. 1860.	"	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind		118	1,859,813						1st Mortgage.....	791,000	7		1866	
do do										2d "	160,000	7		1870	
Buffalo and State Line.....	N. Y. & Pa.	121	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.		75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.		96	3,798,400	8,820,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	357,000	6		1864	
Central Ohio.....	Ohio.		137	In hands of Receiver.	3,673,000	1,126,438	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7		1861	
do do										1st "	800,000	7		1864	
do do										2d "	80,000	7		1865	
do do										3d " S. F.	950,000	7		1865	
do do										4th " S. F.	1,367,800	7		1876	
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	140,000	7		1865 & 1870	
do do										2d "	60,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.		222	In hands of Receiver.	6,168,520	730,000	994,569	235,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d "	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						3d "	1,000,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		194	2,897,756	7,335,403	50,386	720,705	230,119	Apr. 1, 1861.	2d "	200,000				
do do										Pref 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	41 1/2	Feb. & Aug.	
Chicago and Rock Island.....	Ills.	55	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	2d "	3,600,000	7	41 1/2	Feb. & Aug.	
Chicago, Burlington and Quincy.....	"	61 1/2	138	4,689,340	4,514,515		1,514,428	761,830		1st Mortgage.....	2,000,000	6	11	May 1.	
do do										Cons. 1st Mort. S. F.	2,172,000	8	99	1870	
do do										2d " S. F.	813,000	8		1869	
do do										1st Mor. Chi. & Aur.	390,000	7		1867	
do do										2d "	303,000	7		1869	
do do										1st "Cent. Mil. Tract	39,000	7		1864	
do do										2d "	245,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.		60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000			1867	
do do										2d "	950,000			1860	
Cincinnati Wilmington & Zanesville ..	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
Cleveland and Mahoning	Ohio.		68 1/2	1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,509				
do do										1st Mortgage.....	850,000	7			
do do										2d "	490,000	7			
do do										3d "	344,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	18 1/2	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	0	13 1/2	1860	
do do										2d " M. L. or 1st Ex.	1,382,000	7		1873	
do do										3d 2d Ex.....	1,163,000	7		1865	
Cleveland and Toledo.....	Ohio.	46 1/2	148	3,343,800	3,850,570	196,413	910,971	493,956	May 31, 1861.	4th 3d Ex.....	1,154,000	7			
do do										1st Mor. Jan. 1st Div.	359,000	7		1867	
do do										1st " " 2d Div.	263,000	7		1872	
do do										2d " "	265,000	7		1862	
do do										1st " Tol. Nor & Clev	521,000	7		1863	
do do										2d " "	293,300	7		1861	
do do										Junction Income..	44,500	7		1862	
do do										C. & T. Income...	300,000	7		1864	
Cleveland, Columbus and Cincinnati.	Ohio.	109	135	4,746,100	519,000	4,201	1,235,003	604,898	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"		98 1/2	3,000,000	1,602,000	none	1,063,403	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7		1861	
do do										2d "	303,000	7		1860 to 1866	
Columbus and Xenia.....	Ohio.		54 1/2	1,490,000	290,700	50,500	See L. Miami.			Dividend.....	272,700				
Columbus, Piqua and Indiana.....	"		103	In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"		142	2,176,666	2,512,000					2d "	2,912,000	8			
Dayton and Western.....	Ohio.		38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7		1875	
Detroit and Milwaukee.....	Mich.		186	No report						1st Mortgage.....	2,000,000	7		1866	
do do										2d "	1,000,000	8			
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.		111	No report											
Dubuque, Marion and Western.....	"		51	No report											
Eaton and Hamilton.....	Ohio.		36	469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.		132	96,061	1,219,100	249,868	124,140			2d "	400,000				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	18,000				
do do										2d "	1,993,000				
Galena and Chicago Union.....	Ills.	69	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,320,000		100	1862 & 1863	
do do										2d "	1,041,000	10	99	May 1, 1875	
Great Western	Ills.		175	1,600,000	2,391,000		455,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,350,000	7			
do do										1st " E. D.					
Green Bay, Milwaukee and Chicago...	Wis.		54	400,000	No report										
Greenville and Miami.....	Ohio.		32	300,000	473,000	75,000	63,141	13,573	Sept. 1, 1860.	Land mortgage...	5,000,000		67 1/2	1873	
Hannibal and St. Joseph.....	Mo.		206	1,041,066	10,551,000	220,366	996,907	512,933	Aug. 31, 1861	Mortgage Conv.....	1,354,000	6		1869 & 1870	
do do										1st Mortgage.....	937,000	7		1870	
Hartford and New Haven.....	Conn.		62	2,350,000	927,000	13,356	712,876	354,136	Sept. 30, 1860	1st Mortgage.....	4,000,000	0	102	1875	
Hudson River.....	N. Y.	35 1/2	144	3,758,466	9,107,000	182,106	2,047,145	773,121		2d "	2,000,000	7		1875	
do do										3d "	1,840,000	7		1875	
Illinois Central.....	Ills.	65 1/2	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	28,000	7		1868	
do do										Construction.....	12,885,000	7	93	1875	
do do										"	4,115,000	6		1875	
do do										Debentures.....	42,740	7			
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	60,000	0			
do do										2d "	578,000	10			
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,284	140,689	448,858	230,834		Income.....	38,700	11			
do do										1st Mortgage.....	500,000	7		1866	
do do										2d "	400,000	7			
Indianapolis Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort...	200,000	7			
do do										1st Mortgage.....	649,984	7			
Iowa Central Air Line.....	Iowa.			245,000	755,000	No report	No report			2d "	314,000				
Iron.....	Ohio.		13	118,865	50,000	No report	No report								

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Iron Mountain.....	Mo.	86½		\$ 190,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,900	.....	302,006	122,797	Dec. 31, 1860.	1st	29,000	7		1861	
do										2d	392,000	7		1873	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st	260,000	7			
do										2d " Conv.....	1,000,000	7			
do										3d	600,000	7			
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	90,000				
do										2d " E. D.	1,000,000		12		
do										1st Land Grant W. D.	4,000,000				
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.	29		514,433	130,000		108,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883	
Little Miami.....	Ohio.	6½					1,530,000	529,981	Jan. 1, 1862	City Loan.....	174,000				
Louisville and Frankfort.....	Ky.	65		1,169,59	344,519		245,910	98,679	June 30, 1861	1st Mortgage.....	218,000	7			
do										1st	2,000,000	7			
Louisville and Nashville.....	Ky.	368		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.	288		2,500,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,680	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.	303		8,561,213	190,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv.....	2,500,000	7		1868	
do										2d	2,000,000	7			
do										3d	1,500,000	7			
do										Sterling Income.....	333,000	4			
Michigan Central.....	Mich.	55½	284	6,057,724	7,968,489	125,000	2,126,699	910,169	May 31, 1861	Domestic	928,617	6		1872	
do										1st Mortgage Sterling.....	487,484	6	100	1869	
do										1st " Conv.	500,000	8		1860	
do										1st " unconv.	250,000	8		1869	
do										1st " Dollar Conv.	2,500,000	8		1862	
Michigan South'n & North'n Indiana	Mich. &	24½	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. So.	991,000	8	93	1860	
do										" Nor. Ind.	985,000	8	90	1861	
do										" Goshen Line.	1,168,000	8½	88½	1868	
do										S. F. Toledo	2,850,000	8½	85	1865	
do										2d Mortgage	2,465,000	8	73	1877	
do										1st Mortgage.....	400,000	8			
do										2d	20,000	8			
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	400,000	8			
do										2d	500,000	8			
Milwaukee and Prairie du Chien.....	Wis.	27½	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,550,000	7		1891	
Milwaukee and Western.....	Wis.	71		No report											
Mississippi and Missouri.....	Iowa,	55		No report											
do										1st Mortgage Conv.....	1,000,000	7			
do										2d " S. F.	400,000	8			
do										Oskaloosa Div.	1,425,000	7			
do										Land Grant.....	7,000,000	7			
New Jersey.....	N. J.	33	34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000				
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.						
New York and Erie Pref.....	N. Y.	61½		Sold under mortgage			5,590,916	1,979,400	Sept. 30, 1860						
do		37½								1st Mortgage.....	3,000,000		105		
do										2d	4,000,000				
do										3d	6,000,000		56		
do										4th	4,900,000		8½		
do										5th	1,792,000		76		
New York and Harlem Pref.....	Conn.	31½	138	5,717,190	6,055,752	.....	1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	101	1873	
do										2d	1,000,000	7		1864	
New York and New Haven.....	Conn.	33		3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7		Dec 1, 1868	
do											974,000	7		Oct. 1, 1875	
New York Central.....	N. Y.	83½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,192,000	6	98	May 1, 1884	
do										Mortgage.....	3,000,000	7	104½	June 15, 1864	
Northern Central.....	Pa.	138		2,260,000	5,890,300	557,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,063,300	6		1865	
North Missouri.....	Mo.			2,433,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,500,000	6			
Ohio and Mississippi, Eastern Div....	Ohio & Ind.	192		Leased	9,680,000	2,300,030	896,817	153,669	May 1, 1861.	1st Mortgage.....	2,194,000	6			
do										3d	316,905				
do										Construction.....	4,637,920				
do										Income.....	3,591,183				
Ohio and Mississippi, Western Div....	Ills.	148		.....	3,292,403		No report			State Loan.....	7,000,000	6	38		
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W.	2,000,000	6			
do										Construction.....	4,500,000	6			
Pennsylvania.....	Pa.	339		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.....	4,900,000	6		1888	
do										2d	2,319,000	6		1875	
do										3d	1,957,410	6		1875	
do										State Works.....	7,200,000	5			
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report			1st Mortgage.....	2,300,000	6		1884	
Philadelphia, Wil. and Baltimore.....	Del.	98		5,600,000	2,310,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1873	
do										1st Mort. O. & P.	1,000,000	7		1865	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	2d " "	750,000	7		1866	
do										1st " O. & I.	1,000,000	7		1872	
do										2d " "	380,000	7		1873	
Pittsburgh and Connellsville.....	Pa.	40		1,753,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000	7			
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,065,328	220,850	68,438	May 10, 1861.						
do															
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856	
do										"	997,000	7		1866	
do										"	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,974	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1866	
do															
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	56		40,075	500,000	100,000	110,200	53,100		1st Mortgage.....	300,000				
do										2d	450,000				
Staubenville and Indiana..	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d	900,000	7		1865	
do										1st Mortgage Conv.....	1,000,000	7	75	1862	
do										2d " Conv.	2,000,000	7		1863 & 1871	
do										1st " Bel. & Ill.	517,000	7		1873	
do										1st Mortgage.....	2,000,000	7	75½	1866	
do										1st Mortgage.....	3,400,000	7		Aug. 1, 1860.	
do										2d	2,500,000	7	45	Nov. 1, 1871	
do										Mort. Coupons.....	96,049	7		1860 to 1864	

deed, the excellent quality of the cast steel at present made in Sheffield for these purposes is scarcely to be surpassed. Of late years several of the most enterprising manufacturers have sought to introduce cast steel for a variety of other purposes besides those for which it was originally employed, and it is now used, in some form or other, in almost every first class machine. Its employment as a material for founding bells and various other articles in clay molds, as carried out by Messrs. Naylor and Vickers, and the introduction of a valuable material by Messrs. Howell and Shortridge, under the name of homogeneous metal, are prominent examples of the successful adaptation of cast steel to engineering purposes.

The manufacture of cast steel by Huntsman's process is so extensively practiced, and is so well known that it is unnecessary to do more than to recall to mind that crude pig-iron has first to go through all the stages of melting, refining, puddling, hammering, and rolling, in order to produce a bar of malleable iron as nearly pure as the most careful manipulation in charcoal fires can make it. Bar iron, on which so much labor, fuel, and engine power have been expended, thus becomes the raw material of this most expensive manufacture. In order to convert the wrought-iron bars into blister-steel, they are packed with powdered charcoal in large fire-brick chests, and are exposed to a white heat for several days the time required for heating and cooling them extending over a period of fifteen to twenty days. When thus converted into blister steel, they are broken into small pieces and sorted according to the quality of steel which sometimes differs even in the same bar. For melting this material, powerful air furnaces are employed, containing two crucibles, into each of which are put about 40 lbs. of the broken blistered steel. In about three hours the pots are removed from the furnaces, and the melted steel is poured into the iron molds, and formed into ingots of cast steel; from 3½ to 4 tons hard coke being consumed for each ton of metal thus melted. When large masses of steel are required, a great many crucibles must be got ready all at the same moment, and a continuous stream of the melted metal from the several crucibles must be kept up until the ingot is completed, since any cessation of the pouring would entirely spoil it; hence, in proportion to the size of the ingot, are the cost and risk of its production increased. The ordinary manufacture of cast steel is therefore obviously conducted at a great disadvantage. If cast steel is to supersede wrought-iron for engineering purposes, it will be necessary to cease employing wrought iron as a raw material for this otherwise most expensive mode of manufacture.

The extremely high temperature requisite to maintain malleable iron in a state of fusion has, from the earliest period of the history of iron down almost to the present day, rendered its purification in a fluid state practically and commercially impossible. Hence arise all those imperfections to which bar iron is subject, every small piece consisting of numerous granules partially separated from each other by scoria, and every large mass being produced only by piling together small bars, with the inevitable result of increasing the former imperfections; for no two pieces of iron can be brought to a welding heat without becoming coated with oxide; and when this coating is rendered fluid by welding sand, a fluid silicate of the oxide of iron is formed, covering the entire surface to be united. The blows of the hammer or the pressure of heavy

rolls may, and do, extrude the greater portion of this fluid extraneous matter, but it is never wholly removed from between the welded surfaces, and hence a portion of the cohesive force of metal is lost at every junction. When a bar of iron is nicked on one side and bent, the rending open of the pile clearly shows this want of perfect cohesion. Nor is this the only difficulty to be encountered; for in the production of large masses of wrought-iron it is necessary to raise the temperature nearly to the fusing point, in order to render each additional piece sufficiently soft and plastic to become united to the bloom. This softening of the iron induces a molecular change in the structure of the metal; its natural tendency to crystallize is so powerfully assisted by the long continuance of the high temperature, that its whole structure undergoes a change; large and well defined crystals are formed almost independently of each other, and cohering so feebly to the other contiguous crystals, as in some cases to separate with as little force as would overcome the cohesion of ordinary cast iron.

In the substitution of cast steel for malleable iron, both these sources of difficulty are escaped; for the mass, whether of one ton or twenty tons weight, may be formed in a fluid state into a single block, wholly free from the admixture of scoria, while it is perfectly and equally coherent at every part, and the forging of such a solid block of metal into shape is only the work of a few hours; and as there is no welding of separate pieces, it may be worked under the hammer at a temperature at which no molecular change will take place; the metal being far below its fusing point, and much too solid to undergo that destructive crystallization so common in large masses of wrought-iron. Thus the difficulties and uncertainties attending the production of all large masses of wrought iron are wholly avoided in producing equally large masses of cast steel.

But, however desirable in the abstract it may be to employ cast steel as a substitute for malleable iron for engineering purposes, it must not be forgotten that there are several important conditions indispensable to its general use. First the steel must be able to bear a good white heat without falling to pieces under the hammer, otherwise the process of shaping it will not only be expensive, but the partly-finished forging may be spoiled at any moment by being overheated. Secondly, the steel should be of such a tough character as to admit of being twisted or bent into almost any form in its cold state before fracture takes place, whether the force be applied as a gradual strain or by sudden impact. Thirdly, it should have a tensile strength at least 50 per cent greater than that of the best marks of English iron. Fourthly, it must especially be soft enough to turn well in a lathe, to bore easily, and to yield readily to the file and chisel, so as not to enhance its original cost by the difficulty of working it into the requisite forms. This last is the most commercially and practically important condition, and one which will in future greatly determine the extent of its use.

The earnings of the Galena and Chicago Railroad the third week in March were:

1863.....	\$17,984
1861.....	28,205
Decrease.....	10,221

—The earnings of the Hudson River Road, in consequence of the non-opening of navigation, will show a very large gain in March over last year.

RAILROAD COMPANIES IN N. J.

CAMDEN AND AMBOY RAILROAD CO.

Capital Stock R. R.	\$2,710,860
" " of Canal.....	2,198,400

FUNDED DEBT.

6 per cent. Loan.....	\$800,000
5 " "	210,000
6 " "	225,000
6 " "	357,000
3 " "	800,000
6 " "	1,730,000

Also, a loan authorized by the Stockholders for straightening double track of..... 2,500,000
Of this loan only \$807,000 have been issued.

In addition to the above, there has been a loan of £185,000 sterling for the stock of the Philadelphia and Trenton Railroad. Also, a loan of \$1,175,000 to the Belvedere Delaware Railroad and branches, and Freehold and Jamesburg Agricultural Railroad. Also, a premium loan in England of £48,383, for the extension of the Sterling loan to 1880. A sinking fund for which has been established for redemption of said loans.

The cost of the Delaware and Raritan Canal	\$3,255,702 55
Receipts of Canal last year.....	5,918,651 15
Expenses.....	469,593 73
Leaving net.....	177,559 53
Rents of Railroad.....	312,387 50
Expenses.....	2,058,949 61
Leaving net.....	1,145,159 65
Leaving net.....	963,229 69

CENTRAL RAILROAD CO.

Capital Stock.....	\$3,630,000 00
First Mortgage Bonds.....	4,400,000 00
Second Mortgage Bonds.....	6,000,000 00
Quarterly Dividend 2½ per cent. due January 1st.....	90,750 00
Interest accrued, not yet due.....	47,533 33
Accounts payable.....	210,017 57
Balance to credit of revenue fund.....	172,855 39
Total.....	\$5,970,499 29
Cost of Railroad, &c.....	4,904,667 99
" Equipments.....	504,500 00
" Ferry-boats, &c.....	426,407 81
Cash and accounts receivable.....	131,920 49
Total.....	\$5,970,499 29

RECEIPTS LAST YEAR.

Passengers.....	\$282,508 75
Merchandise.....	382,598 75
Coal.....	568,273 83
Mails and Express, Rents, &c.....	98,831 00

Total.....	1,301,895 50
Expenses.....	592,452 70
Net earnings.....	679,443 30

Dividends, amounting in the whole to 10 per cent have been made during the year.

MILLSTONE AND NEW BRUNSWICK R. R. CO.

Capital Stock.....	\$102,365 00
Debt.....	7,740 00
Cost of Road.....	111,114 00
Receipts last year.....	8,365 02
Expenses.....	4,613 22
Total net receipts.....	3,751 80

HACKENSACK AND NEW YORK RAILROAD.

Capital Stock paid in.....	\$67,000 00
Mortgage Bonds.....	4,000 00
Cost of Main Line.....	108,000 00
Cost of Local Branch.....	20,000 00
Receipts past year.....	15,700 00
Expenses.....	13,200 00

MILLVILLE GLASSBORO RAILROAD.

Capital Stock.....	\$185,098 56
Cost of Road.....	190,422 06
Receipts last year.....	13,231 40
Expenses.....	8,910 87

PATTERSON AND HUDSON RIVER RAILROAD.

Capital Stock.....	\$630,000 00
Cost of Road.....	630,000 00
Leased and worked by another Company.....	
Rent per annum.....	53,400 00
Dividend, semi annually, 4 per cent	

CAMDEN AND ATLANTIC RAILROAD.

Capital Stock paid in.....	\$99,363 56
Funded Debt.....	1,087,375 50
Floating Debt.....	92,212 20
Cost of Road and Equipments.....	1,331,848 88
Receipts past year.....	99,432 01
Expenses.....	69,356 70

MORRIS AND ESSEX RAILROAD.

Capital Stock.....	\$1 157,800 00
Funded Debt.....	340,000 00
Contingent Fund.....	26,181 12
Cost of Road, &c.....	1,737,991 32
Receipts the past year.....	210,934 81
Expenses.....	121,919 41
Interest.....	22,513 70
Dividends paid amount to.....	81,046 00

SUSSEX RAILROAD CO.

Capital Stock.....	\$187,776 00
Funded Debt.....	236,315 86
Floating Debt.....	3,031 18
Cost of Road, &c.....	417,143 04
Receipts the past year.....	23,811 51
Expenses.....	13,746 80

BELVIDERE DELAWARE RAILROAD.

Capital Stock.....	\$ 9,862 24
Funded Debt.....	2,182,000 00
Special Loans.....	75,086 70
Temporary.....	81,105 31
Cost of Road and Equipments.....	3,134,656 39
Receipts the past.....	241,502 74
On the Flemington Road.....	11,399 94
Expenses.....	162,647 68

PETROLEUM OIL.

In our last we noticed the explosive qualities of much of the Petroleum Oil that is now in market. We find in a cotemporary the following communication from a gentleman well versed in the merits of this article:

MR. EDITOR: As several serious accidents have occurred from the use of this oil for light in coal-oil lamps, it becomes a humane duty to caution the public against its use. The destruction of three lives recently at Crestline and two explosions at Washington, Fayette Co., should put all persons on their guard, against using an article so fraught with danger and death. Manufacturers, or refiners of Petroleum, send this fluid into the market, standing as high as 48° to 58° by Baume's hydrometer. Its cheapness and brilliant light, with the assurance of the refiner that it is as safe as coal oil at 40° tempts the unskilled and thoughtless to purchase and use it, without thinking of the hazard to which they expose the lives of their families and their houses.

The burning of this fluid in coal-oil lamps is as dangerous as to attempt to burn camphene or burning fluid in them. The coal-oil lamp is not adapted to its use. The rapidity with which this fluid generates gas, and the explosiveness of that gas, scattering fragments and flames on all sides, constitutes the danger. The old camphene lamp is much better for carbon oil than the coal-oil lamps. A better lamp, however, for its uses may be invented. But it is temerity to attempt it in coal oil lamps.

The Legislature should provide, under some penalties, that the barrels or packages containing this fluid should be clearly and distinctly marked or branded "Refined Petroleum," or "Petroleum Burning Fluid," and that any retailer who should sell such fluid as coal oil should be subject to severe penalties, and liable to damages to the party imposed upon. The same law should also make it penal to sell or dispose of coal oil, as a burning fluid, that is lighter than 42° of Baume's hydrometer.

When the cupidity of manufacturers or refiners overcomes their moral sense to the danger of the public, it is the duty of the legislator to interfere as he would against the murderer or thief.

It is not charged upon any manufacturer or refiner, that he wantonly exposes the lives or property of his fellow men to danger, but it is known that the use of carbon oil is dangerous by the lamentable proof now made public, and proper precautions should be taken to guard and protect the public against it.

I am in no wise interested in making of either coal or carbon oil, and write through motives of humanity only. I DILLY.

MONETARY AND COMMERCIAL.

The past has been a week of most perfect quiet in financial matters.

The demand for exchange has been moderate, and the market ruled steady throughout the week, at par buying and $\frac{1}{2}$ premium selling rates.

Gold dull, but held firmly at $\frac{3}{4}$ @1 prem. buying, and $1\frac{1}{2}$ to 2 prem. selling. There is hardly any demand, however. We quote;

	Buying.	Selling.
New York.....	par@ $\frac{1}{2}$	$\frac{1}{2}$ prem.
Boston.....	par@ $\frac{1}{2}$	$\frac{1}{2}$ prem.
Philadelphia.....	par@ $\frac{1}{2}$	$\frac{1}{2}$ prem.
Baltimore.....	par	$\frac{1}{2}$ prem.
Gold.....	$\frac{3}{4}$ @1 prem	$1\frac{1}{2}$ @2 prem.

—The leading article in the circular of Messrs Samuel Hallett & Co. for the steamer discusses the currency question:

The additional \$100,000,000 of United States Treasury notes, to serve as money and to be legal tender in the discharge of all contracts, are now nearly prepared, and will come into circulation in a few days. A measure so novel, and unprecedented in modern times, can not be regarded otherwise than with great interest, both from its influence upon commerce and trade, and from its bearing upon the received theories and doctrines in reference to the all important question of currency.

It would be almost superfluous at this late day to enlarge upon the reasons that led to the adoption of gold and silver as currency. The law in this, as in all other cases, corresponds with the phenomena, or fact. Gold and silver have an attraction for the race stronger than any other kind of property. A person possessing them can supply any want, and purchase complete personal immunity among every civilized or barbarous people. All place a similar value upon them. Not so of any other kind of property. What is valuable as food and clothing in one country may be valueless in another. This universal preference for gold and silver lies at the foundation of their adoption as currency. Their high relative value and divisibility, without reducing their value, are further qualifications to serve as currency, but not the principal one.

The use of the precious metals as money being to effect exchanges of property, it is plain that a saving is made whenever an exchange can be effected without their intervention. On a large scale, and in commercial transactions between nations, exchanges are effected by offsetting the title deeds to property, which are bills of exchange, one against the other. It is only to meet the balance remaining against one of the parties that the precious metals are called into use—and then a merchandise rather than currency. Exchange between persons composing the same community are effected in a similar manner; the mode in which settlements are made between the banks of this city being a case sufficiently in point.

Such has been the progress made in the science of exchange of commodities, that gold and silver are now seldom used on a large scale. Property passes by transfers of the evidence of the title. When a person gets a loan at bank he does not, as a rule, carry away with him gold and silver, which his contract entitles him to do, but the promises of the bank to pay gold or silver to bearer. Whatever the capital of the bank consists of, the voucher he receives constitutes him the owner of a corresponding portion of its capital. It may consist of gold and silver or the promises of its debtors to pay gold and silver, which they have in effect borrowed.

The bills of the bank, consequently, are treated as the money they represent; and in common parlance, are money; but they would not be money if issued by a bank possessing no capital, consequently nothing can possess the attribute of money except gold and silver or title deeds to merchandise, and convertible at all times into gold and silver. Such title deeds, which consist of the bills, or checks on banks, serve the same office in effecting exchanges as gold and silver, which hardly interposes in the ordinary transaction of business, except in the payment of balances.

Any attempt to substitute a currency in the place of one of gold and silver, or of title deeds of the same, or of merchandise, must prove a disastrous failure for two reasons: it is not convertible into the universal currency founded in nature; and as it does not represent an equal value in merchandise, its transfer from hand to hand passes nothing but a promise, the value of which may be entirely contingent. The promise must be sold before its value can be realized. It is not money, nor can it perform the office of money, which is to effect exchanges—the thing being wanting which it effects to represent. And here arises the great evil of a currency not based upon the precious metals, or upon merchandise.

The issues of a bank without a penny of capital may be treated as capital till the fact of its insolvency is known, and become the foundation of important business transactions, which must fail with that of the promise upon which they were founded. The evils that flow from banking are precisely of this character—the promises are treated as capital when they may be worth no more than the paper they are written on.

We do not distrust the promises of Government; on the other hand, we have constantly labored to demonstrate their value. We have only to refer to experience in proof. But promises are not title deeds to property nor merchandise equal to their nominal amount. Their transfer from hand to hand does not, like transfers of bills of exchange, pass gold and silver, or property in form fitted for consumption.

They can not consequently possess the attributes of money. If these are treated as

capital, and made the basis of business or industrial operations, these must in the end fall from the unsubstantial foundation on which they rest. The capitals of banks are actual accumulations, which, so far as they go, may support the labor and furnish the material necessary for the construction of a railroad. But suppose such an enterprise be undertaken based entirely upon promises to pay which do not represent a corresponding amount of property fitted to sustain labor, it is plain that such enterprise may fail entirely; or that the promises upon which it is based will sink in value just in ratio to the excess of their issue over the means for their instant redemption.

Such must be the result of the issue of Treasury notes to pass as money, though the degree of their depreciation and consequent harm may be slight. The country is rich and strong, and a mistake or blunder reaching only \$150,000,000 may be readily borne. Still the law can not be violated without a corresponding penalty. The inevitable tendency of Treasury notes will be to fall in value compared with true standards—gold and silver. The decline may be gradual, but none the less certain. The mere increase in amount of money thrown into circulation, will have the effect to raise the market value of all kinds of property. When this money is no addition to the capital of the country, such increase in price is only another name for depreciation in the value of the paper currency compared with that of gold and silver.

Such has been the universal experience upon the subject. It was strikingly illustrated during the suspension of specie payments by the Bank of England. The bills of the bank were much nearer being money than Treasury notes. They were issued upon commercial paper discounted, upon gold and silver, and upon deposits of Government Securities. They were the symbols of existing values—not mere promises to pay. Yet they were at a discount varying all the way from 10 to 42 per cent. discount. The following statement, taken from the report of the committee appointed in reference to the resumption of specie payments, shows the price of corn for a series of years, when paid for in gold or in bank notes:

Years.	Price of a quarter of Wheat when p'd for in bank notes.	Do. when p'd in gold.
1809.....	95 00	91 00
1810.....	106 60	85 06
1811.....	94 00	74 00
1812.....	115 00	90 00
1813.....	111 00	74 60
1814.....	74 00	56 66

We shall in this country soon begin to witness a similar result. It is the inevitable consequence of two standards of value—one measurably permanent, dependent upon cost of production; the other corresponding in amount to the wants of the party issuing it, and its market value depending upon public opinion, and consequently constantly varying.

The addition of \$150,000,000 to the currency of the country will stimulate trade. Importations will increase, to be paid for in gold and

silver. Interest on Government securities must be also paid in coin. This will create an active demand, which must tend to put up the price of the latter. But if there were no such demand, still there would be a difference between the value of the new currency and gold and silver, just in ratio to the difference in actual values of which cost of production is an important element. It is a law, the effect of which can not be avoided, and may soon, in this country, show as wide a difference between the value of the two currencies as ever existed in England.

ERIE RAILWAY.

Great Broad Gauge, Double Track
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TO

NEW YORK, BOSTON,

AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States' Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6. CHARLES MINOT, Gen'l Sup't.

N. W. BALDWIN,

MATHEW BAIRD.

M. W. BALDWIN & CO.

ENGINEER'S

BROAD AND HAMILTON ST.

Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotive Engines.

419 y

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily for the foot of Mill, on Front-street, Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M. Chicago at 6:00 A. M., connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.

W. H. L. NOBLE,

General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

KNOX & SHAIN,
Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums by Franklin Institute.)

OHIO & MISSISSIPPI

RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENNES, Cairo, and St. Louis.

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Leokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.

RETURNING.—Mail Train Leaves East St. Louis, (Sunday excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M., arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office No. 5 East Third street; No. 1 Burnet House, corner of north-west corner of Front and Broadway; Spencer House Office; and at the Depot, corner of Front and Mill Streets.

G. B. McCLELLAN, Gen'l Superintendent
Novemb 11th, 1861.

1861. 1861
FAST TIME.
LITTLE MIAMI
AND
COLUMBUS AND XENIA
AND
CINCINNATI, HAMILTON & DAYTON
RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation—From Little Miami Depot.

3:30 P. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad for Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Richmond, Indianapolis and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express—From Cincinnati, Hamilton and Dayton Depot—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,

General Ticket Agent

Omni-buses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet Walnut & Vine
CINCINNATI O

W. MORRILL.

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MORRILL & BOWERS,

(Successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality, in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give perfect satisfaction to all.

1862. 1862.
Pennsylvania Central R.R.
285 MILES DOUBLE TRACK.



(With its Connections)
IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
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FROM PITTSBURGH TO NEW YORK
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Railroad Machine Works,
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CELEBRATED WHEELS,

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General Ticket Agent, Richmond, Ind.
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FOR 1861

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BRIDGE & DEPOT BUILDERS.McCallum, Bristol & Co., are prepared to construct
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Machine, the beauty and strength of stitch, being ALL ON
BOTH SIDES, impossible to unravel, and leaving no chain or
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Continue to receive orders and to furnish with promptness
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Railroad Machinery, Tires, etc.

-AND ALSO TO-

Rebuild and Repair Locomotives.

The above works being located on the New York Central
Railroad, near the center of the State, possess superior
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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, APRIL 10, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

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On square, single insertion.....	\$1 00
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If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

TO ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

If Railroad officers will place us under obligations if they will forward promptly to this office the Annual Reports, Monthly Statements, and such other matters as they may deem worthy of publication.

Subscribers in Great Britain, 13s. 6d. (\$3 payable in advance).

Arrival and Departure of Trains.

	Depart.	Arrive.
Cincinnati, Hamilton & Dayton—		
Logansport & Chicago Express.....	7.30 A. M.	9.15 P. M.
1st R. I. C. T. & Sand. Mail.....	7.30 A. M.	5.45 P. M.
Dayton & Toledo.....	7.30 A. M.	9.15 P. M.
2nd. Ham. Accommodation.....	9.00 A. M.	8.10 A. M.
3rd. Richmond, Day. & Bell'n Ex.....	3.30 P. M.	9.15 P. M.
4th Dayton, Tol. & Detroit Ex.....	5.30 P. M.	11.25 A. M.
Logansport and Chicago Express.....	7.30 P. M.	8.10 P. M.
Glendale Accommodation.....	7.30 P. M.	7.00 A. M.
6th Columbus Express.....	10.00 P. M.	7.40 A. M.
Little Miami—		
Morrow Accommodation.....	7.40 A. M.	1.30 P. M.
2d. Day Express.....	9.45 A. M.	6.50 P. M.
Camp Dennison Accommodation.....	3.15 A. M.	6.10 P. M.
3d. Columbus Accommodation.....	4.00 P. M.	10.31 A. M.
4th. Xenia Accommodation.....	5.50 P. M.	8.00 A. M.
Marietta & Cincinnati—		
1st. Mail Express.....	8.10 A. M.	10.05 A. M.
2d. Accommodation.....	3.30 P. M.	5.45 P. M.
Cincinnati, Wilmington and Zanesville—		
1st. Mail Express.....	9.45 A. M.	8.00 A. M.
2d. Accommodation.....	5.50 P. M.	6.45 P. M.
Ohio & Mississippi—		
1st. Mail Train.....	7.00 A. M.	10.05 P. M.
2d. Aurora Accom.....	3.15 P. M.	7.55 A. M.
3d. Express Train.....	7.20 P. M.	8.28 A. M.
Indianapolis & Cincinnati—		
1st. Mail.....	5.50 A. M.	9.45 A. M.
2d. Accommodation.....	2.45 P. M.	5.10 P. M.
3d. Chicago Express.....	5.00 P. M.	12.20 A. M.
Kentucky Central—		
1st. Express.....	6.38 A. M.	10.44 A. M.
2d. Accommodation.....	2.24 P. M.	7.10 P. M.
Cincinnati & Chicago Air Line—		
1st. Mail.....	7.30 A. M.	9.15 A. M.

ETHNOLOGY OF OHIO.

THE PHYSICAL MAN.

The Annual Report of Mr. Mansfield, Commissioner of Statistics, contains some curious statements in regard to the Physical Man of this State, and is, so far, a contribution to American Ethnology. The composition of the people of Ohio is not materially different from that of the main body of people in the United States.

Mr. Mansfield says: "I may here remark that there is far less variety in the races of people who inhabit the United States than many have imagined. In fact, there is very little. The United States have been peopled almost exclusively by English, Scotch, Irish, Hollander, and German. Among these are but two real varieties of race—the German (Gothic) and Celtic. That part of the Irish and Scotch who descended from the ancient inhabitants are Celtic; and among all the rest there is very little difference in stock. Our proper title is *ANGLO-AMERICAN*; in other words, mainly the *Europo-Gothic Stock*."

The measurements and descriptions of 798 men, in different parts of Ohio, give the following results:

Average height, 5 feet, 9 4-10ths inches.

Average weight, 158 lbs.

239 of these men were taken from interior towns, mostly farmers, miners, and laborers—all natives of the United States, and mostly of Ohio. 238 were taken from country villages, and 321 from Kennett's regiment of cavalry. The average is, therefore, a very fair one; except that so many in Kennett's regiment were only eighteen years of age, or minors, that the average was below the average of men generally. Many of the men were measured in their shoes—so that putting one error against another, the average is very nearly correct. In order to contrast this with some of the most civilized nations of Europe, we give the following comparisons, taken from the Report on Statistics:

1. Average height of men in Ohio..... 5 ft., 9 4-10ths in.
2. Average height of Belgian men, taken from Quatlet's work, "Sur l'Homme"—3,500 individuals..... 5 feet, 5 1/2 inches.
3. Average of recruits, enlisted in the London District, taken from Johnson's National Atlas, (England)..... 5 ft., 6 9-10ths in.
4. Average of 11 Highland regiments, taken from the same..... 5 ft., 7 9-10ths in.

It seems from this that the average height of Ohio men is four inches above that of the Belgians; two and a half inches above that of English London recruits, and one and a half above that of the Scotch Highlanders. The measurement round the chest, however, is as important in reference to the strength of men as height; and in this particular the Scotch Highlanders rather excel, being seven inches more round the chest than the Belgians, and two inches more than Americans. The product of the two dimensions, (height and circumference,) is very nearly the same; so that the American and the Scotch Highlander are about equal in physical develop-

ment, and are decidedly better developed than most European nations.

These facts seem to put an effectual end to a doctrine advanced by Buffon and other European savans, that men, and even all animals, degenerated in America. Probably America, where the face of Nature is on so grand and diversified a scale, will yet produce better developed forms of the human being than has heretofore existed. We shall not discuss the artistic doctrine that Greek models are the best, or that a race of gigantic Titans once existed. We have sufficient evidence that giants are exceptional cases, and Greek models the creation of art, rather than of Nature. It is beyond a doubt, that in these broad mountain ranges, which make a large part of Virginia, of Kentucky, and of Tennessee, as well as on those broad plains, where the means of life are so richly furnished, in Ohio, Indiana, and Illinois, there is a race of men, quite equal in stature and strength to the best developed races of men who have lived any where on earth. Their natural advantages for physical culture and growth are quite equal to those of any other people, and much better than most of the people in European nations. Why, then, should they not be physically developed to the highest point? The facts seem to show this to be actually the case.

The general characteristics of the Physical Man of Ohio, as determined by Mr. Mansfield, are three:

1. In height, 5 feet, 9 4-10ths inches.
2. In weight, 158 lbs.
3. Complexion—light, in the proportion of 2 to 1.
4. In eyes—light, in proportion of nearly 2 to 1.
5. In hair—light, in proportion of 3 to 2.

In complexion, the people of Ohio are what is called fair. There are very few of the olive, brunette, or dark complexion. The great majority are light, or sanguine.

The eyes are generally light, in which class are placed the blue and grey eyes—which class are the majority.

The hair is the only feature among Americans, and especially in Ohio, which approaches the characteristics of the dark nations. Even in this, the majority have what may be called light hair—including most of the brown haired. On the whole, the Anglo-American, especially in Ohio, is a modified German of the time of Tacitus, whose description of the Germans in his day answers very well for a large part of our people. The admixture, however, with the original Gothic stock, of many Irish, and some French, of the darker races, has modified the eyes and hair—so that the blue eye and light brown hair are no longer so prevalent as they were among the ancient Germans. But the German race has been modified in America, in another particular, for which mixture with Irish and French will not account. How are we to account for

the increased stature, and the enlarged development of the Anglo-American? Is it not true, that a mild climate, better living; in fact, a better condition, has really improved, physically, the emigrant from Europe to America? This is directly contrary to the theory of European writers; but so are the facts. Is there not a theory of Physical Man, which will account for all these differences, and accord exactly with the Divine Revelation of the harmony between moral and physical relations? Supposing man to have been created with a certain unity of measure and strength, will not that be varied by social and moral conditions? If we find the Hottentot, or Bushmen, the weakest in physical development of all races—the Anglo-American and Scotch the strongest—and other nations intermediate—each in physical life corresponding to the scale of their social well being—is it not pretty strong evidence that there is a necessary correspondence between these classes of facts? The only facts which seem to make against such a theory is that some races of blacks in Africa, like some North American Indians, are said to be strong and well formed. But of purely savage races, we can have no means of determining their real development; since, it is well known, that the weak and infirm are destroyed, if not purposely, yet as a consequence of their savage life. At any rate, there are facts enough to show that Christian civilization has advanced the strength as well as the life of man. Much is unquestionably due to race, but more yet to the culture of the race. The ethnological studies, which now engage the attention of the learned, will bring out a social science which will be worth all the rest.

EAST BOUND FREIGHT RATES.

At a meeting of freight agents of the various Eastern roads in this city it was decided to reduce Eastern rates. The following roads were represented:

Little Miami and Columbus and Xenia—J. N. Kinney, General Freight Agent.

Cincinnati, Hamilton and Dayton—J. R. Reed, Freight Agent.

Pennsylvania Central—H. W. Brown & Co., Freight Agents.

Baltimore and Ohio—H. F. Hecker, Freight Agent.

Cleveland, Columbus and Cincinnati—T. J. Gettier, Freight Agent.

Marietta and Cincinnati—A. B. Waters, General Freight Agent.

Dayton and Michigan—D. C. Henderson, Freight Agent.

Central Ohio and Steubenville—L. Devenny, General Freight Agent.

J. N. Kinney was chosen Chairman, and L. Devenny, Secretary.

The Chairman submitted the following schedule of rates, as proposed by the Eastern roads:

Cincinnati and Indianapolis—4th Class. Flour.			
To New York—All rail	78	1	55
Rail and water	73	1	45
To Philadelphia—All rail	70	1	40
Rail and water	65	1	30
To Baltimore—All rail	65	1	30
Rail and water	60	1	20
Dayton, Xenia and Springfield—			
To New York—All rail	76	1	50
Rail and water	71	1	40
To Philadelphia—All rail	68	1	35
Rail and water	63	1	25
To Baltimore—All rail	63	1	25
Rail and water	58	1	15

On motion of H. W. Brown, the above schedule was adopted, to take effect April 1.

The following despatch from Baltimore gives the rates to that city:

Camden Station, Baltimore, March 29.

H. F. HECKER, Agent:—Make rates to Baltimore from Cincinnati, commencing April 1st, 65 cts. on fourth class and \$1 30 on flour, all rail; and 60 cts. on fourth class and \$1 20 on flour, rail and water, Ohio river. Points between Cincinnati and Parkersburg same as rail and water from Cincinnati. Similar reduction, namely, 8 cents on fourth class and 15 cents on flour from river and interior points.

Should any doubt exist of the safety of freight by our line, you are authorized to furnish Company's guarantee against loss or damage by military seizure. We have entire confidence in the permanent security of the road, the Government having arranged for its ample and complete protection. The connection of the road was completed this afternoon, and the whole line is now working with safety and success. Large quantities of freight from the Ohio and the West will be delivered in Baltimore on Monday, the 31st.

JOHN KING, Jr.

HUDSON RIVER RAILROAD.—The earnings of this road for the month of March this year and last have been as follows:

March 1862.....	\$308,967 46
1861.....	167,559 96
Increase.....	\$141,407 50

This increase is owing to the fact that in 1861 the ice in the Hudson river broke up much earlier than this year. There has, however, been a steady increase in the earnings of the road, during the last six months, corresponding with the increased earnings of the New York Central R. R. The earnings of the six months, from October to March last year, were \$1,179,929 55, for the same months this year, \$1,515,167 38. Increase, \$325,287 83. Last year there was a large deficit in the earnings of the Company to meet its necessary expenses.

We notice that our old friend, Capt. F. D. May, is now representing the interests of the Steubenville Short Line from Pittsburgh to Cincinnati, in the city of Baltimore. Capt. May was the General Freight Agent of this line at New Orleans, up to the latest moment when it was practicable for an uncompromising Union man to remain in that city. The Captain is well known among our railroad friends. He has our good wishes in the Monumental city.

MILWAUKEE AND PRAIRIE DU CHIEN RAILWAY.

The report of this company, under date of Dec. 31 1861, shows the condition of the company up to that time.

The organization of this company took place on the sale of the Milwaukee and Mississippi Railroad. The articles of association were filed 18th to 21st of January, 1861, in accordance with the laws of Wisconsin. The purchase was completed January 21, 1861, and possession of the entire property taken the following day, since when it has been operated for account of the present proprietors. The law requiring an annual report on the 31st of December, the Board of Directors concluded to make their fiscal year in accordance. The report, therefore, shows the operation of the road for eleven months and ten days, during which time the earnings were:

From freight.....	\$835,172 60
" passengers.....	211,249 91
" mails and rents.....	45,394 07
" Mississippi River Ferry.....	16,337 20
	\$1,108,353 78

And the expenses were:	
Repairs of road and bridges.....	\$166,155 16
Repairs of locomotives.....	38,435 90
" cars.....	43,693 50
" buildings etc.....	18,624 50
General superintendence.....	20,063 43
Station service.....	74,496 79
Foreign agency and Adv.....	10,952 26
Pay of train hands.....	71,755 28
Fuel.....	72,543 83
Oil and waste.....	12,019 87
Loss and damage.....	5,776 31
Taxes.....	11,143 54
Mississippi River Ferry Exp.....	11,710 97
Interest and exchange.....	13,459 71
Other operating expenses.....	21,795 57
Embankment and new bridges.....	13,485 73
New buildings.....	12,865 76
New locomotive.....	16,331 82
New fence, 4½ miles.....	14,604 00
Twenty new stock cars.....	13,510 89
Other extraordinary expenses.....	15,359 55
	672,314 37

Net earnings.....	\$436,039 41
Disbursed as follows, viz:	
Paid Milwaukee & Mississippi Railroad Co. under liens upon property purchased.....	\$15,110 08
Paid for real estate.....	500 00
Interest on bonds for the year.....	118,405 00
Contributions on sinking fund.....	9,150 00
Balance to new account.....	292,874 43
	\$436,039 41

The above expenses are divided as follows: Repairs of road and equipment, \$266,509 06; ordinary operating expenses, \$325,647 56; extraordinary expenditures \$80,147 75—total \$672,314 37.

The earnings of the Southern Wisconsin Branch were \$33,030 23, the expenses (of which \$6,366 69 were for fencing 17.87 miles) \$25,032 51, and the net earnings \$7,997 72. The report says:

The earnings of this portion of the road have been seriously affected by the competition existing between the Racine and Mississippi, Illinois Central, and Galena and Chicago railroads. Freight under this competition has been taken so low, that grain from districts which have been considered tributary to this road has been drawn to stations on the above roads. To meet this, the rates on freights were reduced until the difficulties between the above roads could be adjusted, and paying rates restored; but much freight has been lost to the road, and low rates received for what has been obtained.

The earnings of the Mississippi River Ferry were \$16,337 20, the expenses \$12,910 97 (of which \$1,200 were for two new barges purchased last fall,) and net earnings \$3,426 23. The company now have nine barges for the transportation of grain in bulk. One new barge is being constructed to be delivered in the spring.

The following statement shows the material used during the year in repairs of road and bridges:

1,347 tons new and re-rolled iron.....	\$34,892 00
100,099 lbs chairs.....	4,059 90
95,000 lbs spike.....	3,196 66
102,000 ties.....	35,700 00
4,616 repaired rails.....	3,280 98

\$81,059 54

—or 45 per cent. of the entire expense.

The quantity of new and repaired rails laid is equal to 32 $\frac{3}{4}$ miles of continuous track, or about one seventh of the whole road. This amount should be increased for the next two years, as the iron on the eastern division, not heretofore renewed (about 84 miles), has been down an average of ten years, and is badly worn, largely increasing the repairs of rolling stock.

Extensive repairs have been made to the engines, the efficiency of those in use at the commencement of the year fully maintained, and two added to the number, one of which was constructed in the shops of the company, and another one, not in use at the commencement of the year, re-built and made a first-class engine. The company have now; 7 first-class passenger, and 26 first-class engines; 4 second class, used for switching; and 8 old engines not in use for some years. One of these is now being rebuilt, and the others can be as the business of the company may require. The company have also 31 first-class, 4 second-class, 11 baggage, 426 box freight, 101 platform, 35 gravel, 24 ditching, and 46 hand cars. No additions have been made, or will be required, to the number of passenger cars; 20 new stock cars have been added; 157 old freight cars repaired; and 30 grain cars contracted for. These, with 16 to be built in the company's shops, will be all that will be required the coming season.

There being no construction account, all expenditures have been embodied in general account as operating expenses, and are 60.67 per cent of gross earnings. Deducting the extraordinary expenditures, which may properly be considered construction, as the amount has been added to the company, the expenses would be 53.44 per cent.

The number of way passengers carried has been 120,672; of through passengers, 9,511—total, 130,183. Total mileage of passengers, 7,725,894.

The number of tons of way freight carried was 190,671; of through freight 115,123—total 305,794. Total tons carried one mile, 37,175,350.

As stated above, the road passed into the

hands of its present proprietors on the 21st of January, 1861. The purchase price was \$7,500,000, payable and paid as follows:

In first preferred scrip stock with convertible bonds attached.....	\$2,556,000
In full paid first preferred stock.....	1,095,400
“ second “.....	1,096,800
“ common “.....	2,761,800
	\$7,500,000

Upon examination, the road proved to be in better condition than was expected considering the financial troubles of the Milwaukee and Mississippi Railroad Company; notwithstanding which, much expenditure was, is yet, and will be for 18 months to come, required, to put it in a condition to be economically worked. The narrow means of the company while building it necessitated much deficiency and temporary work, and financial troubles of the same after its completion prevented renewals and repairs to the extent and at the time required for its safe and economical operation. It is believed that if the earnings will enable the company to continue the repairs and necessary station completions on last year's scale, for 18 months longer, the road will then be in a condition to be kept up to an efficient state, and run from 50 to 52 per cent on earnings equal to those of last year. Much diversity of opinion exists as to the productiveness of the Southern Wisconsin Branch. Being run in close connection with the main line, it is difficult to apportion to it a proper share of all expenses. No portion of the general office, organization and sinking fund expenses have been charged to it.

The earnings of the road from the 1st to the 21st of January, 1861, were: From freight \$35,428 32; from passengers, \$6,191 45; mails and rents, \$3,433 12—total, \$45,052 89. The total earnings of the road, therefore, from January 1st to December 31st, 1861, were \$1,153,406 67. In 1860, they were \$799,841 45. In 1859, \$746,498 78. In 1858, \$883,817 89. The increase in the earnings of 1861 over 1860, were \$353,565 22. The president, in his report, says:

Increase of business requires and necessitates a corresponding increasing of facilities to do it.

If, as stated above, the finances of the builders of the road necessitated deficient construction, it is but natural that station facilities should mostly have been of a nature only calculated to meet the undeveloped business of the district tributary to them; hence, that as that business develops, the station facilities must be increased, completed or extended.

Reference to the monthly and yearly tables of earnings clearly shows that the business has increased, and that it is not evenly distributed over the year, but at given periods presses upon us to an extent that it cannot be properly cared for with our present facilities. To stand still is to retrograde. If we can not accommodate business natural to us, it must and will seek other channels less

natural to it. We have but a choice between progress and retrograding—the latter endangers the success of the company by affecting the productiveness of its property.

The former necessitates additional facility, and consequent expenditure. To make such property, prudently, and as small as possible, yet supply the deficiency, has been a cause for much careful thought and consultation.

Our rolling stock has been taxed to its utmost, and the bringing in forty per cent of the total of our cars daily, full loaded, for weeks in succession, is proof that is well managed; but in the face of so doing, wheat would accumulate, especially at Prairie du Chien, where for four weeks we had from seventy-five to one hundred thousand bushels waiting cars to take it. The wooden storehouse and sheds were filled, and much lay outside exposed to the weather for want of room to shelter it. The locality and nature of our buildings preclude the chance of procuring adequate fire insurance. The risk is greater than the Company can prudently and knowingly continue to run. It was forced upon us this year, but should if possible be avoided hereafter. Wooden buildings, with steamboats, sometimes seven at a time, on one side, and locomotives constantly passing up and down on the other, sparks showering from both, from one to two hundred thousand dollars worth of property in and around such buildings, which with the sheds, platforms and adjoining grounds, are over-crowded, and but a few thousand dollars insurance on the whole, as an amount of risk this Company can not prudently run.

To obviate such risks and accommodate the increasing business, we have two ways open before us.

1. By an increase of rolling stock. This would seem the most natural. One hundred new cars suitable for wheat transportation might overcome the difficulty, unless it increases the next season; but these cars would stand idle three-fourths of the year, yet would depreciate nearly as much as if in constant good use.

2. By building an elevator of about 250,000 bushels capacity.

Our present elevator, built under the receiver, was too economically built—is only of 18,000 bushels capacity. The stone wall under it, to high water mark, already requires repairs. It is not available except at medium stage of water, while the busiest periods are most at the highest and lowest stages of water.

An elevator of 250,000 bushels capacity would, to some extent, enable a more even distribution of our business—would obviate the necessity of the purchase of one hundred new cars. While doing more business, and having the power of scattering it, we shall be less pressed for cars at some periods, and have less idle ones at others. Fire insurance

can be had, and at reasonable rates. One hundred new cars would cost sixty-five thousand dollars. An elevator, as above, would cost forty-seven thousand dollars. The cars would cost repairs in ratio of ten per cent. yearly, or be worthless in ten years. The elevator would, perhaps without repairs, or at least with very slight repairs, be, ten years hence, as good as new for our purposes, and would be so arranged as to be available at all stages of water, and would pay interest on its cost in the saving of labor, as compared with our present arrangements. Aside from all this, the elevator would give us 250,000 bushels storage room over winter—a consideration, when, as is already the case, the elevators on our station here are both filled to their utmost capacity.

These views have induced me to cause the necessary plans and contracts to be made. The elevator is required for the fall business, and every preparation is making to have it ready in proper time. The track will have to be extended to the elevator, and proper side track arranged. The entire improvements and alterations at Prairie du Chien, including the elevator, are calculated to cost not exceeding \$75,000 in the aggregate. It is not proposed to alter the passenger station at Prairie du Chien.

This company assumed, with some alterations, the contract made between Messrs. Angus Smith & Co. and the Milwaukee and Mississippi Railroad Company, relating to elevators on the station at Milwaukee. Under that original contract, one elevator of about 350,000 bushels capacity had been built. It was inadequate for the wants. Under the altered contract with this company, Messrs. Angus Smith & Co. built a second elevator of 800,000 bushels capacity. Both elevators are now filled, and other storage room has to be found for grain coming in. The building of each elevator necessitated docking, dredging, filling in of station grounds, and laying of track. Under the contract, this Company as well as the Milwaukee and Mississippi Railroad were to pay the expense of such work, but Messrs. Angus Smith & Co. were to pay the interest, ten per cent per annum, thereon. On the first contract there was yet due Messrs. Angus Smith & Co. over \$10,000 which this company paid, charging it to Milwaukee and Mississippi Railroad account. Under the second, or present contract, the amount of such work is \$7,671 25. It has been paid, and likewise draws interest at ten per cent. per annum.

The amount stated above, as paid the Milwaukee and Mississippi Railroad Co., was partly for a balance due Angus Smith & Co., which operated as a lien on the property, and partly for other items, rights of way, etc. All liens on the property, when paid, are charged to the Milwaukee and Mississippi Railroad Co., and the total at the end of the year

passed to income account, merely with a view of keeping an account which shall show the payment, of liens, subject to which the property was bought.

The following statement will show the financial condition of the company at the close of the fiscal year. The sinking fund account amounts to \$131,400, by the cancelling of first preferred scrip stock with bonds attached to the amount of \$30,000; of full paid first preferred stock \$34,600; and full paid second preferred stock, \$66,800—which deducted from issues leaves outstanding \$7,368,600. This account has been opened to show the yearly investments, and the total amount cancelled. General property account is left at \$7,500,000; whenever sinking fund account shall show \$1,500,000 cancelled, it must be carried to general property account, which then will be reduced to \$6,000,000, as required by law.

Balance of General Ledger, Dec. 31, 1861.

Cost of road.....	\$7,500,000 00
Funds in New York.....	313,236 50
Operating material on hand.....	73,411 47
..... provided for.....	26,388 53
Balances due from agents and other companies.....	16,866 03
Cash in hands of paymaster.....	3,705 28
Cash in Bank and on hand at Milwaukee....	102,796 26
	\$8,006,604 07

First mortgage bond and scrip stock:

Original issue.....	\$2,556,600 00
Less returned by trustees of sinking fund and cancelled.....	30,000 00
	\$2,526,600 00

First preferred stock:

Original issue.....	\$1,095,400
Less returned by trustees of creditors of M. & M. R. R. Co. and cancelled.....	34,600
	1,060,800 00

Second preferred Stock:

Original issue.....	1,086,800
Less returned by trustees of creditors of M. & M. R. R. Co., and cancelled.....	66,800
	1,020,000 00

Common Stock, total issue.....	2,761,800 00
Coupon account.....	17,325 00
Material reserve account.....	26,588 53
Convertible property and old debts accounts.....	141,261 59
Sinking fund account.....	131,400 00
Debts payable, unpaid pay-rolls and bills.....	55,549 62
Income account, balance.....	292,874 33
	\$8,036,804 07

President—L. H. MEYER.

Directors—L. H. Meyer, John Catlin, William P. Lynde, W. Schall, Allan Campbell, George Smith, N. A. Cowdrey, John Wilkinson, H. L. Dousman.

Vice President and Counsel—John Catlin.

Secretary and Treasurer—Wm. Taintor.

General Manager—James C. Spencer.

Superintendent—Wm. Jervis.

BALTIMORE AND OHIO RAILROAD.—Through passenger trains on this road leave as follows: Baltimore at 8.40 A. M., arriving at Cumberland 5.54 P. M., and at Wheeling at 5.18 the next morning. Returning, leave Wheeling at 9.50 P. M., arriving at Cumberland 8.56 the next morning, and at Baltimore at 6 P. M. But one through train per day will be run till the new track has been put in perfect order. Safety is guaranteed to passengers and freight on this route.

NORTHERN RAILWAY, CANADA.

The Montreal Gazette gives the following statement of the condition of this Company: The gross earnings for the year have amounted to..... \$410,939 91
The total expenditure to..... 278,962 80

Yielding a net revenue for the year of..... \$131,971 11

Thus showing that the gross earnings have increased (as in comparison with 1860) 23 per cent., and the net revenue 82 per cent.

The accruing interest at the rate of six per cent. per annum, upon the whole issue of the Company's bonds, (first and second preference,) has been duly met, and provision made for dividends payable on the 1st January, and 1st of February of the current year.

The position of the net revenue account since the date of reorganization, (1st August, 1859, to 31st December, 1861,) is as follows:

By total net revenue to 31st December, 1861....	\$219,801 83
By interest on deposits, etc.....	1,387 38
	\$221,189 21

To payment of interest accrued on bonds, discounts, stamps, etc., to 31st December, 1861..... \$121,592 61

To appropriations for interest payable 1st January and 1st February, 1862..... 65,098 60

186,691 21

Estimated balance to credit of interest fund.... 34,498 00
Estimated balance reported 31st December, 1860 32,285 96

Increased credit, 1861..... \$2,272 51

Thus it appears that the year 1861 has met its full interest liability, with a surplus to the credit of the accumulating interest fund.

The comparative statement for the last three years is as follows:

	1859.	1860.	1861.	Incr. 1861
Gross earnings \$240,014 66	\$332,967 01	\$410,939 91		
Total expen. 197,199 91	268,466 56	278,962 80		
Net revenue \$42,844 95	\$72,500 45	\$131,971 11	\$59,470 66	or 82 per cent.

In pursuing the comparisons of the past with previous years, the following averages are obtained:

	1859.	1860.	1861.
Per centage of expenditure to gross earnings.....	82 per ct.	77 1/2 per ct.	68 per ct.
Mileage earnings per week.....	\$49 10	\$68 11	\$84 07
Mileage expenditure ".....	40 34	53 18	57 06

Freight tonnage of all classes:

	1859.	1860.	1861.
Through freight.....	28,373	36,553	21,162
Local freight.....	63,420	88,787	120,592
	91,402	125,345	175,754

No. of passengers carried 78,072 91,582 100,618

From the foregoing review of the operations of the Company during the past three years, it is apparent there has been a steady and progressive increase in the trade and earnings of the line, and an equally steady reduction in working expenses, and consequent augmentation in net revenue.

The contract works have been proceeded with in the most satisfactory manner, as well with reference to the character of the works executed as to the progress made, and the relation of the Company with the contractors (Messrs. Brassey & Co.) continue to be cordial and efficient.

The expenditure upon contract works of restoration during the year has been \$369,426 89, making a total contract expenditure to date, of \$516,842 40, and leaving an unex-

pending balance of the appropriation amounting to \$180,185 60.

The report of Engineer with appendices sets forth the details of this expenditure and the works it represents. It is sufficient here to note that the permanent way has been to a large extent relaid and ballasted; thirty miles of double fencing provided; the timber structure in culverts, bridges, etc., replaced by others in stone and iron; the rolling stock largely renewed; and the class and character of the general works and plans of the Company raised to efficient working and permanent condition.

The expenditure of the balance of appropriation of works will fulfill the services originally contemplated.

ON THE MANUFACTURE OF CAST STEEL, AND ITS APPLICATION TO CONSTRUCTIVE PURPOSES.

BY MR. HENRY BESSEMER, OF LONDON.

These desirable objects are believed by the author to be fully accomplished by his process of converting crude pig iron into cast steel at a single operation; forming the subject of the present paper. This process has now been in daily operation in Sheffield for the last two years at Messrs John Brown & Co's Atlas Steel Works, Sheffield.

The crude pig iron chiefly used in this process has been the hot-blast hæmetite pig smelted with coke, which is melted in a reverberatory furnace, and is then run into a vessel, in which its conversion into steel is to be effected. The converting vessel is made of stout boiler plate, and lined with a powdered silicious stone found in the neighborhood of Sheffield below the coal, and known as "ganister." The rapid destruction of the lining of the converting vessel was one of the great difficulties met with in the early stages of the invention; the excessive temperature generated in the vessel, together with the solvent action of the fluid slags, was found to dissolve the best fire brick so rapidly, that sometimes as much as two inches thickness would be lost from the lining of the vessel during the thirty minutes required to convert a single charge of iron into steel. The ganister now used, however, is not only much cheaper than fire-bricks, (costing only about 11s. per ton in the powdered state,) but it is also very durable. [A portion of the lining of the vessel was shown, which had stood ninety-six consecutive conversions before its removal.] The converting vessel is mounted on bearings which rest on stout iron standards, and by means of the gearing and handle it may be turned into any required position. It has an opening at the top for filling and pouring out the metal, and in the bottom of the vessel are inserted seven fire clay tuyeres, each having seven holes. The blast from the engine is conveyed through one of the bearings of the vessel into the tuyere box, at the bottom of the vessels, and enters the tuyeres at a pressure of about 14 lbs. per square inch, which is more than sufficient to prevent the fluid metal from entering the tuyeres.

Before commencing with the first charge of metal, the interior of the converting vessel is thoroughly heated by coke, with a blast through the tuyeres to urge the fire; when sufficiently heated it is turned upside down, and all the unburnt coke falls out. The vessel being now turned to nearly a horizontal position,

melted pig iron is run in from the furnace by the spout, the vessel being kept in such a position, during the time of filling, that the holes of the tuyeres will be above the surface of the metals. When the proper charge of iron has been run in, the blast is turned on, and the vessel is quickly moved up into a vertical position. The blast now rushes upward into the fluid metal from each of the forty-nine holes of the tuyeres, producing a most violent agitation of the whole mass. The silicium always present in greater or less quantities in pig-iron is first attacked, and unites readily with the oxygen of the air, producing silicic acid; at the same time, a small portion of the iron undergoes oxidation, and hence, a fluid silicate of the oxide of iron is formed—a little carbon is simultaneously burnt off. The heat is thus gradually increased until nearly the whole of the silicium is oxidized, which generally takes place in about twelve minutes from the commencement of the process. The carbon of the pig iron now begins to unite more freely with the oxygen of the air, producing at first a small flame, which rapidly increases, and in about three minutes from its first appearance a most intense combustion is going on; the metal rises higher and higher in the vessel, sometimes occupying more than double its former space, and in this frothy fluid state it presents an enormous surface to the action of the air, which unites rapidly with the carbon contained in the crude iron, and produces a most intense combustion, the whole mass being, in fact, a perfect mixture of metal and fire. The carbon is now burnt off so rapidly as to produce a series of harmless explosions, throwing out the fluid slag in great quantities; while the combustion of the gases is so perfect that a voluminous white flame rushes from the mouth of the vessel, illuminating the whole building, and indicating to the practiced eye the precise condition of the metal inside. The blowing may thus be left off whenever the number of minutes, from the commencement and appearance of the flame indicate the required quality of metal. This is the mode preferred in working the process in Sweden. But, at the works in Sheffield, it is preferred to continue blowing the metal beyond this stage, until the flame suddenly drops, which it does just on the approach of the metal to the condition of malleable iron; a small measured quantity of charcoal pig-iron, containing a known proportion of carbon, is then added, and thus steel is produced of any desired degree of carburization; the process having occupied about twenty eight minutes altogether from the commencement. The converting vessel is tipped forward and the blast shut off for adding this small charge of pig-iron; after which, the blast is turned on again for a few seconds.

The spout of the vessel is then depressed, and the fluid steel is run into the casting-ladle, which is carried by a hydraulic crane, it being counterbalanced by a weight on the opposite end of the gib. When all the metal is poured out of the converting vessel, the crane is raised by water pressure and turned round, for the purpose of running the steel into ingot moulds. Instead of tilting the casting-ladle for pouring into the molds, it is made with a hole in the bottom, fitted with a fireclay seating and closed by a plug of fire-clay forming a conical valve. The valve rod is coated with loam and bent over at the top, and works in guides on the outside of the ladle, with a handle for opening and closing the valve. By thus tapping the metal from

below, no scoria or other floating impurities are allowed to run into the mold, and the stream of fluid steel is dropped straight down the center of the mold right to the bottom without coming in contact with the sides of the mold. The molds are made of a slightly tapered form, so that as the ingot contracts in cooling, it liberates itself from the mold completely on all sides; and the mold is removed by being lifted off the ingot when sufficiently set. The molds are arranged in the molding pit in an arc of the circle described by the casting-ladle.

By this process from one to ten tons of crude iron may be converted into cast-steel in thirty minutes, without employing any fuel except that required for melting the pig iron, and for the preliminary heating of the converting vessel; the process being effected entirely without manipulation. The loss on the weight of crude iron is from fourteen to eighteen per cent. with English iron worked in small quantities; but the result of working with a purer iron in Sweden has been carefully noted, for two consecutive weeks, and the loss on the weight of fluid iron, tapped from the blast-furnace, was ascertained to be only 8½ per cent. The largest sized apparatus at present erected is that in use at the Atlas Steel Works, Sheffield, the converting vessel being capable of receiving four tons at a time, which it converts into cast-steel in twenty eight minutes. In consequence of the increased size of the converting vessel, in this case, no metal is thrown out during conversion, and the loss of weight has fallen as low as ten per cent. including the loss in melting the pig iron in the reverberatory furnace.

Specimens of this manufacture, as carried on at the author's works in Sheffield, were exhibited, consisting of a piece of the pig iron employed, which is No. 1 hot blast hæmetite made with coke; also, a portion of an ingot of very mild cast-steel, broken under the hammer to show the purity and soundness of the metal in its cast unhammered state; and an ingot, partly forged, to show how little work with the hammer will produce a forging from these solid blooms of steel. There were also two pieces of steel of the quality employed for making piston-rods, which had been bent cold under a heavy steam hammer to show the toughness of the metal; it required very much more force to bend it than would be required to bend wrought iron, but, notwithstanding this additional rigidity, it will yield to any extent without snapping. The tensile strength of this soft and easily wrought metal is as much as forty tons per square inch, or from fifteen to eighteen tons greater than that of best Yorkshire iron. In turning, planing, boring, and tapping, it will be found that the uniformity of its quality will be less trying to the cutting tools than the hard reeds and sand cracks met with in the common qualities of malleable iron. The above tensile strength of the piston-rod steel, however, is by no means the maximum, but, on the contrary, is nearly the minimum strength of the steel converted by this process; but, at the same time, it possesses nearly a maximum degree of toughness; for every additional ton of tensile strength, obtained by the addition of carbon, hardens the steel for working, renders it more difficult to forge, and brings it nearer to that undesirable state when a sudden blow snaps it like a piece of cast iron.

From tables compiled from experiments made at the Woolwich Arsenal, it appeared that after hammering or rolling, the steel or highly carbonized metal exhibits a mean tensile strength of sixty-eight tons per square

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.		48	\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.		380	13,111,800	10,781,833	566,070	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do										"	2,500,000	6		1885	
do do										"	700,000	6		1880	
do do										"	1,122,500	6		1875	
do Washington Branch.....	Md.		30	1,650,000	1,256,750	139,129	314,090	8,795	Dec. 1860.	1st Mortgage.....	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind.		118	1,859,813						2d ".....	791,000	7		1866	
do do											160,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	121	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.		75	1,101,432	1,428,000		104,809	21,073		1st Mortg. 1st Div.	593,000			1864	
Camden and Amboy.....	N. J.		96	3,98,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	37,000	6		1861	
Central Ohio.....	Ohio.		137	In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000			1864	
do do										1st ".....	800,000	7		1865	
do do										2d ".....	80,000	7		1865	
do do										3d " S. F.....	950,000	7		1865	
do do										4th " S. F.....	1,365,800	7		1876	
Central of New Jersey.....	N. J.		64	2,200,000	3,180,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	140,000	7		1865 & 1870	
do do										2d ".....	600,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.		222	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7			
do do										2d ".....	1,535,000	7			
do do										3d ".....	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d ".....	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		194	2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.....	1,250,000	7	41	Feb. & Aug.	
do do										2d ".....	3,600,000	7	41	Feb. & Aug.	
do do										2d ".....	2,000,000	6	11	May 1.	
Chicago and Rock Island.....	Ills.	55	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	8	99	1870	
Chicago, Burlington and Quincy.....	"	61	138	4,689,340	4,814,315		1,514,428	761,830		Cons. 1st Mort. S. F. 2d " S. F.....	2,172,000	8		1863	
do do										1st Mor. Chi. & Aur.	813,000	8		1890	
do do										2d ".....	390,000	7		1867	
do do										1st "Cent. Mil. Tract	303,000	7		1869	
do do										2d ".....	390,000	7		1864	
do do											245,000	8		1868	
Chicago, Iowa and Nebraska.....	Ind.		82	No report											
Cincinnati and Chicago Air Line.....	Ohio.		60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000			1867	
do do										2d ".....	950,000			1880	
Cincinnati, Hamilton and Dayton.....	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d ".....	532,000				
do do										3d ".....	104,000				
Cleveland and Mahoning.....	Ohio.		68	1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,509				
do do										1st Mortgage.....	850,000	7			
do do										2d ".....	400,000	7			
do do										3d ".....	341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	18	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L. 2d " M. L. or 1st Ex. 3d 2d Ex.....	800,000	7	13	1860	
do do										4th 3d Ex.....	1,165,000	7		1873	
do do										1st Mort. Jun. 1st Div. 1st " 2d Div.	1,154,000	7		1865	
Cleveland and Toledo.....	Ohio.	46	148	3,343,800	3,850,670	196,413	919,971	493,956	May 31, 1861.	2d " Tol. Nor. & Cleve 2d ".....	359,000	7		1867	
do do										Junction Income.. C. & T. Income.....	263,000	7		1872	
do do										1st Mortgage.....	265,000	7		1862	
do do										1st ".....	521,000	7		1863	
do do										2d ".....	293,300	7		1861	
do do											44,500	7		1862	
do do											300,000	7		1864	
Cleveland, Columbus and Cincinnati.....	Ohio.	109	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula.....	"		98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7		1861	
do do										2d ".....	303,000	7		1862	
Columbus and Xenia.....	Ohio.		54	1,490,000	290,700	50,500	See I.	Miami.		Dividend.....	272,700			1860 to 1866	
Columbus, Piqua and Indiana.....	"		103	In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"		142	2,176,666	2,512,000	292,267	375,002	212,107		2d ".....	2,212,000	8			
Dayton and Western.....	Ohio.		38	307,340	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7		1875	
Detroit and Milwaukee.....	Mich.		186	No report						2d ".....	2,500,000	7		1866	
do do											1,000,000	8			
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.		111	No report											
Dubuque, Marion and Western.....	"		51	No report											
Eaton and Hamilton.....	Ohio.		36	469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.		132	986,061	1,219,100	249,688	124,140			2d ".....	18,000				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d ".....	1,000,000				
Galena and Chicago Union.....	Ills.	69	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000		100	1862 & 1863	
do do										2d ".....	1,200,000		99	May 1, 1875	
Great Western.....	Ills.		175	1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage W. D. 1st " E. D.....	1,041,000	10			
do do											1,350,000	7			
Green Bay, Milwaukee and Chicago.....	Wis.		84	400,000	No report	75,000	63,141	13,573		Land mortgage... Mortgage Conv.....	5,000,000		67		
Greenville and Miami.....	Ohio.		32	300,000	473,000					1st Mortgage.....	1,354,000		30		
Hannibal and St. Joseph.....	Mo.		206	1,041,066	10,554,000	220,306	996,907	512,933	Sept. 1, 1860.	1st Mortgage.....	927,000	6		1873	
do do										1st Mortgage.....	4,000,000	7	102	1869 & 1870	
Hartford and New Haven.....	Conn.		62	2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	2d ".....	2,000,000	7		180	
Hudson River.....	N. Y.	35	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	3d ".....	1,840,000	7	86	1875	
do do										4th ".....	38,000	7	77	1868	
Illinois Central.....	Ills.	65	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	12,885,000	7	93	1875	
do do										Construction.....	4,115,000	6		1875	
do do										Debentures.....	42,740	7			
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	60,000	7			
do do										2d ".....	578,000	10			
Indianapolis and Cincinnati.....	Ind.		110	1,639,900	1,362,284	140,659	448,858	230,834		Income.....	38,700	10			
do do										1st Mortgage.....	500,000	7		1866	
do do										2d ".....	400,000	7			
Indianapolis Pittsburgh and Cleveland.....	Ohio.		84	835,971	1,023,284	9,936	277,952	26,773	Dec. 31, 1860.	Real Estate Mort... 1st Mortgage.....	200,000	7			
do do										2d ".....	649,984	7			
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report								
Iowa.....	Ohio.		13	118,865	50,000		No report				314,000				

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.	86 1/2		\$ 197,097	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st ".....	29,000	7		1861	
do										2d ".....	392,000	7		1873	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st ".....	290,000	7			
do										2d " Conv.....	1,000,000	7			
do										3d ".....	600,000	7			
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiv. er.						1st Mortgage E. D.	90,000				
do										2d " E. D.	1,000,000				
do										1st Land Grant W D ..	4,000,000		12		
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report		June 30, 1861	1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.	29		514,433	130,000		107,944	43,267	Jan. 1, 1862	1st Mortgage.....	1,300,000	6		1883	
Little Miami.....	Ohio.	65					1,330,050	529,981	June 30, 1861	City Loan.....	174,000				
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		245,910	98,679		1st Mortgage.....	245,000				
do										1st Mortgage.....	2,000,000	7			
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.	288		2,600,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.	205		8,561,213	190,408	108,150	439,649	78,800	Aug. 1, 1861	1st Mortgage Conv.....	2,500,000	7		1868	
do										2d ".....	2,000,000	7			
do										3d ".....	1,500,000	7			
do										Sterling Income.....	333,000	4			
do										Domestic.....	925,517				
Michigan Central.....	Mich.	55 1/2	284	6,057,784	7,968,489	125,000	2,126,609	910,169	May 31, 1861	1st Mortgage Sterling.....	487,483	6		1872	
do										1st " Conv.....	500,000	8	100	1869	
do										1st " unconv.....	250,000	8		1860	
do										1st " Dollar Conv.....	2,598,000	8		1869	
do										1st " S. F. Conv.....	4,153,000	8		1882	
Michigan South'n & North'n Indiana	Mich &	24 1/2	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861	Mort. Mich. So.....	991,000		90	1860	
do										" Nor. Ind.....	983,000		88 1/2	1861	
do										" Goshen Line.....	1,168,000		88 1/2	1868	
do										S. F. Toledo.....	2,750,000		85	1885	
do										2d Mortgage.....	2,465,000		73	1877	
Illwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8			
do										2d ".....	200,000	7			
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8			
do										2d ".....	600,000	8			
Milwaukee and Prairie du Chien....	Wis.	27 1/2	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7		1891	
Milwaukee and Western.....	Wis.	71		No report											
Mississippi and Missouri.....	Iowa,	35		No report											
do															
do															
New Jersey.....	N. J.	33	34	4,397,800	688,600		902,767	579,981	Dec. 31, 1861.	1st Mortgage Conv.....	1,000,000	7			
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860	2d " S. F.	400,000	8			
New York and Erie Pref.....	N. Y.	61 1/2		Sold			5,590,916	1,979,400	Sept. 30, 1860	Oskaloosa Div.....	1,425,000	7			
do		37 1/2		under mortgage						Land Grant.....	7,000,000	7			
do										Mortgage.....	711,000	7			
do															
New York and Harlem Pref.....	Conn.	31 1/2	138	5,717,190	6,055,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7		1873	
do		13		common						2d ".....	1,000,000	7		1864	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7		Dec. 1, 1860	
do														Oct. 1, 1875	
New York Central.....	N. Y.	83 1/2	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,923,000	6	98	May 1, 1883	
do										Mortgage.....	3,000,000	7	104 1/2	June 15, 1864	
Northern Central.....	Md.	138		2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,065,506	6			
North Missouri.....	Mo.			2,437,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,500,000	6		1885	
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,194,500				
do										3d ".....	316,993				
do										Construction.....	4,637,920				
do										Income.....	3,591,183				
Ohio and Mississippi, Western Div....	Ills.	148			3,292,403		No report								
Pacific.....	Mo.			3,193,862	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000	6	38		
do										" S. W.....	2,000,000	6			
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	Construction.....	4,500,000	6			
do										1st Mortgage Conv.....	4,900,000	6		1888	
do										2d ".....	2,319,000	6		1875	
do										2d " Sterling.....	1,957,410	6		1875	
do										State Works.....	7,200,000	5			
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report								
Philadelphia, Wil. and Baltimore....	Del.	98		5,600,000	2,300,000		1,236,507	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6		1884	
do										Improvement.....	119,000	6		1873	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,757,273	2,333,333	781,555	June 30, 1861	1st Mort. O. & P.....	1,000,000	7		1865	
do										2d ".....	750,000	7		1866	
do										1st " O. & I.....	1,000,000	7		1872	
do										2d ".....	380,000	7		1873	
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,553	29,600	Oct. 31, 1860.	Pittsburgh Subs'n.....	500,000				
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,083,328	220,850	68,430	May 10, 1861.						
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856	
do										".....	997,000	7		1866	
do										".....	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1866	
do				40,975	500,000		110,200	53,100							
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000				
do										2d ".....	450,000				
Steuensville and Indiana..	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d ".....	900,000	7		1865	
Terre Haute, Alton and St. Louis....	Ills.	208		No report						1st Mortgage Conv.....	1,000,000	7	75	1862	
do										2d " Conv.....	2,000,000	7		1868 & 1870	
do										1st " Bel. & Ill.....	517,000	7		1873	
Terre Haute and Richmond.....	Ind.	100	73	1,381,450	230,000	none.	377,612	216,183	Dec. 1, 1861.	1st Mortgage.....	200,000	7	75 1/2	1866	
Toledo, Wabash and Western.....	Ohio & Ind	51 1/2	243	2,123,500	5,996,049	52,389	234,545			1st Mortgage.....	3,400,000	7		Aug. 1, 1865	
do										2d ".....	2,500,000	7	45	Nov. 1, 1878	
do										Mort. Coupons.....	96,049	7		1866 to 1865	

inch, but from its hardness and unyielding nature, it is totally unfit for many purposes; while the iron ore entirely decarbonized metal is so soft and copperlike in its texture as to yield to a mean tensile strain of thirty two tons per square inch, a point unnecessarily low, except in cases where a metal approaching copper in softness is required. The soft easy-working, tough metal of the quality used for piston-rods, is therefore believed by the author to be the most appropriate material for general purposes; while the hard steels that range up to a tensile strain of fifty or sixty tons per square inch should be avoided as altogether too expensive to work, and too dangerous to be employed in any case where sudden strains may be brought upon them.

With reference to the employment of the mild cast-steel for constructive purposes, there are few applications of more importance than that which has recently and successfully been made to the construction of steam boilers. The Cornish boiler, as improved by Mr. Adamson, of Hyde, near Manchester, has a large flue tube constructed with narrow plates more than twelve feet long, extending round the flue in one length, and flanged at each edge in a manner which, while it adds greatly to the stability of the flue, demands such qualities in the material employed for its manufacture as are completely found only in metal that has undergone fusion, and has become perfectly homogeneous throughout. A practical illustration of the excellence of this mode of constructing boilers and the powerful strains which the new steel is capable of sustaining safely, is afforded by the steam boilers employed for some time past at Messrs. Platt's works at Oldham where six of these boilers are in daily use; they are thirty feet long and six and a half feet diameter, and the flue is four feet diameter; the plates are five sixteenths of an inch thick, and the working pressure one hundred pounds per square inch.

The advantages of cast-steel are still more marked in the construction of the fire-boxes of locomotive engines. The difficulty of flanging and shaping this work in plate iron without splitting the metal in some part, is so great as to have rendered the employment of copper necessary hitherto for this purpose; but the shape required can now be obtained with ease and certainty by hammering up a sheet of metal rolled from one of the cast ingots, such as that now exhibited. One of these firebox plates, flanged by Mr. Anderson, is also shown, and clearly illustrates the facility with which the new metal may, under skillful hands, be wrought into any required form. The perfect continuity of the material and its entire freedom from joinings or weldings also obviously render it specially suitable for the tube plates of locomotive engines; for however near the holes are made to one another there is no danger of their having a flaw or other weak place between them. Nor is it in the construction of the boiler alone that the cast-steel may be employed with advantage in locomotives; the axles, whether plain or cranked, the piston rods and guide bars, and last, but not least, the wheel tires, are all exposed to so much abrasion, and to such sudden and powerful strains, that a tough strong material capable of withstanding this destructive wear and tear is imperatively demanded for the satisfactory construction and economical working of the engine.

The special aim of the author during the first year of his labors, and which throughout the last six years has never been lost sight of, was the production of a malleable metal peculiarly suitable for the manufacture of ordnance.

By means of the process that has been described solid blocks of malleable cast-steel may be made of any required size, from one to twenty or thirty tons weight, with a degree of rapidity and cheapness previously unknown. The metal can also, with the utmost facility, be made of any amount of carburization and tensile strength that may be found most desirable. Commencing at the top of the scale with a quality of steel that is too hard to bore, and too brittle to use for ordnance, it can with ease and certainty be made to pass from that degree of hardness, by almost imperceptible gradations downward, toward malleable iron; becoming at every stage of decarburization more easy to work and more and more tough and pliable, until it becomes at last pure decarbonized iron, possessing a copperlike degree of toughness not found in any iron produced by puddling. Between these extremes of temper the metal most suitable for ordnance must be found; and all qualities are equally cheap and easy of production.

From the practice now acquired in forging cast-steel ordnance at the author's works in Sheffield, it has been found that the most satisfactory results are obtained with metal of the same soft description as that employed for making piston-rods. With this degree of toughness the bursting of the gun becomes almost impossible; its power of resisting a tensile strain being at least fifteen tons per square inch greater than that of the best English bar-iron. Every gun, before leaving the works, has a piece cut off the end, which is roughly forged into a bar of two inches by three inches section, and bent cold under the hammer, in order to show the state of the metal after forging. Several test bars cut from the ends of guns recently forged were exhibited.

The power of this metal to resist a sudden and powerful strain was well illustrated by a piece of a gun muzzle, which was one of several tubular pieces that were subjected to a sudden crushing force at the Royal Arsenal, Woolwich, under the direction of Col. Wilmot. The pieces were laid on the anvil block in a perfectly cold state, and were crushed flat by the falling of the steam-hammer, but none of them exhibited any signs of fracture when so tested. Probably the best proof of the power of the metal to resist a sudden violent strain is afforded by some experiments made at Liège by order of the Belgian government, which had one of these guns bored for a twelve pound spherical shot of four and three inches diameter, and made so thin as to weigh only nine and a quarter cwt. This gun was fired with increasing charges of powder and an additional shot after each three discharges, until it reached a maximum of six and three quarter lbs. of powder and eight shots of twelve lbs. each or ninety-six lbs. of shot, the shots being thus equal to about one tenth the weight of the gun. It stood this heavy charge twice, and then gave way about 40 inches from the muzzle, probably owing to the jamming of the shots. The employment of guns so excessively light, and charges so extremely heavy, would of course never be attempted in practice.

Some idea of the facility of this mode of making cast-steel ordnance is afforded by the time occupied in the fabrication of an eight teen pounder-gun exhibited to the meeting. The melted pig-iron was tapped from the reverberatory furnace at 11.20 A. M. and converted into cast steel in thirty minutes; the ingot was cast in an iron mold, sixteen inches square by four feet long, and was forged while still hot from the casting operation. By this

mode of treating the ingots their central parts are sufficiently soft to receive the full effect of the hammer. At seven P. M. the forging was completed, and the gun ready for the boring-mill.

The erection of the necessary apparatus for the production of steel by this process, on a scale capable of converting from crude iron enough steel to make forty of such gunblocks per day, will not exceed a cost of £5,000 including the blast engine; hence the author can not but feel that his labors in this direction have been crowned with entire success; the great rapidity of production, the cheapness of the material, and its strength and durability all adapt it for the construction of every species of ordnance.

CITY RAILROADS.

The following are the provisions of a bill introduced into the New York Legislature in relation to the construction of railroads in cities in that State:

Section 1 empowers the Common Council of any city in this State to authorize the construction of railroads in any of the streets, lanes, or avenues of said city, to be propelled by other power than steam, and to pass any ordinances or regulations concerning the construction of such roads.

Section 2 provides that any party desiring to construct a road in any city shall first petition the Common Council, who shall grant the permission to construct the road when such parties shall have advertised, in two papers having the largest circulation, their intention to construct such road, and the streets through which they propose to lay such road, and notifying all property holders on said streets to show cause why such grants should not be made.

Section 3 provides for the appointment of Commissioners, to hear argument for and against such roads, and report in writing their proceedings to the Common Council.

Sections 4 and 5 provide that if not more than one third, in amount, of the property holders interested, remonstrate against the road, the Common Council shall offer the franchise for sale at public auction, due notice of which is to be given twice a week for six weeks, and then sold to the highest bidder, to whom the Common Council shall make the grant.

Section 6 provides that the grantees shall give securities, approved by the Mayor, conditional for the construction of the road on the terms set forth in the grant, and for the payment to the city of any damages for non-performance of the contract on the part of the grantees.

Provision is made for the reimbursement of the parties first petitioning, in case of other parties outbidding and obtaining the grant.

PHILADELPHIA AND BALTIMORE CENTRAL RAILROAD.—"An election for directors of this road was held at Oxford on the 13th January. The contest was quite spirited. Nearly all the stock subscribed was voted. Messrs. H Jones Brooke, of Delaware county, and Mr. Felton, the President of the Philadelphia, Wilmington and Baltimore Railroad, were run in competition for President. The ticket in interest for the latter was elected."—*Elkton Whig*.

This result wholly changes the *animus* and *status* of the Philadelphia and Baltimore Central Railroad, which was projected as a through route to Baltimore, without a ferry or draw

bridges, in opposition to the route via Wilmington and Havre-de Grace. Its financial fortunes, however, were of the most harassing description from the outstart, and hence ensued prostration of credit and dissension among its owners. Having at last succumbed to its neighbor, it is no longer a rival and can never become a competitor, in any sense injurious to the older route.

The new road, which is now open to Oxford, in Chester county, near the Maryland line, will doubtless be extended beyond that point, and be connected with the route now open, to be operated under a friendly policy which will leave to each road the enjoyment of its legitimate business.

The road commences at its intersection with the West Chester and Philadelphia Railroad 17 miles from Philadelphia, and is 78 miles long to its intersection with the Northern Central Railroad near Baltimore; as located and in part completed, 41½ miles are in Pennsylvania and 36½ miles in Maryland; the finished portion, 32 miles, is all in Pennsylvania, Oxford, the present terminus, being 15 miles east of the Susquehanna river, 31 miles of the located line being west of the proposed Susquehanna river bridge, the building of which, as projected, would seem to be indefinitely postponed by the recent election and change of programme.—*United States Railroad and Mining Reg.*

REGENERATING STEAM.

This difficult problem has been solved, Messrs. J. Imray and P. Pigna, the one an English and the other an Italian engineer, both names comparatively unknown to fame, claiming the merit of having in "the steam regenerators" introduced to the scientific world an apparatus which has achieved a desideratum which has so long been looked forward to in vain. The main principle in this invention consists in the exhaustion of the steam into a surface condenser of peculiar construction, instead of to waste against the pressure of the atmosphere, as in the present mode of working steam-engines. The water which results from this condensed steam is pumped into a feed-water vessel, whence it flows into the boiler at a temperature of from 70 to 80 degrees. The effect of this arrangement is in the first instance to prevent the waste of steam, and thus, indirectly, to effect a considerable economy in fuel. By constantly employing the same steam, the feed-water, which usually exceeds 25 gallons daily per horse-power, is reduced to just so much as is required to make up for the unavoidable leakages at joints, packings, and valves, about a quart a day, thus saving more than 99 per cent. on the feed-water, and causing a proportionate reduction of boiler surface and capacity. A further advantage is, that as the feed-water is not only supplied at a heated temperature, but in a state almost pure, being distilled by its continual circulation through the condenser, there are no sudden changes of temperature, and, consequently, little or no deposit or incrustation, on the internal surface of the boiler, the presence of which occasions unequal wear, burning, scaling, and sometimes explosion. The reduction in the requirement of feed-water, an increase of effective steam-pressure caused by the vacuum formed in the condensing receiver, and the avoidance of incrustation in the boiler, conduce likewise to considerable economy in that most important item, fuel; the saving, according to the statement of the inventors, being 50 per cent. for high, and 32 per cent. for low

pressure engines; or, according to another estimate, four tons of coals per horse-power annually. Added to these advantages there are those of decreased weight and bulk of boiler and cheapness in the application of the invention, the total expense of fitting these "regenerators" to ordinary steam-engines being estimated at not more than about £2 per horse-power. The invention, it appears, has been for some time in successful operation at several engineering establishments in France, and is now applied to the steam engine which works the machinery at Messrs. Collinge's axle-factory in the Westminster bridge road, with results, as stated by the principal of that firm, quite equal to those claimed for it by the inventors. On Saturday a number of scientific gentlemen were invited to Messrs. Collinge's to witness some practical experiments in the working of the apparatus; the result of which, as regards increase of power, was that with their engine, which is one of twelve horse power, upon the high pressure principle, 50 strokes per minute were obtained with the "regenerator" attached, against 32 strokes per minute when working in the ordinary way. It was further stated that experiments previously made showed the gain by its use to be equivalent to 42.2 per cent, and the saving in fuel as between 47 cwt. and 68 cwt., in the 60 hours.

CLEVELAND AND MAHONING RAILROAD CO.—

The earnings and expenses of this Road for the months of January, February and March, were as follows:

	1861.	1862.
Passengers.....	\$13,363 93	\$10,402 28
Miscellaneous Freight.....	17,392 10	17,292 63
Or.....	9,529 07	8,366 81
Coal.....	25,633 44	31,071 42
Mail.....	1,256 25	1,377 51
Gross Earnings.....	\$67,074 79	\$67,940 65
Expenses.....	31,315 21	33,122 82
Net Earnings.....	\$35,719 58	\$34,797 83

STEAM ENGINES ON COMMON ROADS IN S. AMERICA.

In 1861, two of Boydel's traction locomotives for common roads were imported into Venezuela, by Messrs. Willet and Las Casas, who had obtained a grant for the exclusive use of such engines on all the roads of the Republic for ten years. Each engine weighed eleven tons, and had cylinders of 7 inch diameter, and 20 inch stroke. The great peculiarity of these engines consists in each having two large driving wheels, which carry an adjustable endless jointed railway. On the Venezuela engines each driving wheel is 6 feet in diameter, and there are two small steering wheels in front. The large driving wheel was furnished with 96 teeth on an inner rim, and it received its motion from the piston through pinion gearing, similar to that of several engines for common roads which have been illustrated in the *Scientific American*. The parts of the two engines were put together at La Guayra, and their route was to Caracas, distant only seven miles in a straight line, but twenty-seven miles by the wild, crooked mountain road, which rises one foot in seven, and attains a total elevation of 7,000 feet. We have been informed by a gentleman from Venezuela, that these engines travel up this steep road, drawing several cars with perfect safety, and yet it is a dangerous pathway for a single horse carriage, as it is so narrow in some places that there is scarcely a foot to spare between the pathway and pre-

cipice one thousand feet in depth. The people of Caracas were astonished when they beheld these engines traveling up their mountain road, entering their town, and turning the narrow streets with perfect ease, drawing ten wagons loaded with coal behind them. This is the greatest feat of mountain traveling, we believe, that has ever been performed by the steam engine.—*Scientific American*.

REFRESHMENT CAR.

We saw, in a recent trip over the Philadelphia, Wilmington and Baltimore Railroad, one of the latest novelties in railroading, a refreshment car, designed to supply the wants of passengers on the Express trains from Philadelphia to Baltimore. It is, we believe, introduced on this road as an experiment to test the practicability of supplying passengers in this manner instead of making unsatisfactory stoppages for meals. The smoking car is divided by a partition, one half, or rather more, being reserved for the smokers, and the balance is fitted up with a counter, and forms a regular saloon. A waiter is sent regularly through the train, and distributes the bills of fare, and receives the orders of the passengers, and brings back the articles neatly arranged on a tray. The following is the Bill of Fare:

PHILADELPHIA, WILMINGTON & BALTIMORE R.R.

Passengers are hereby notified that there is a refreshment car attached to this train. The proprietors are prepared to furnish travelers with good, well cooked food, at reasonable prices.

Check off in pencil what you wish on the annexed Bill of Fare, and hand to the waiter, who will bring your order to your seat.

WARM MEATS.		DRINKS.	
Veal Cutlet.....	12	Coffee.....	6
Mutton Chops.....	12	Tea.....	6
OYSTERS.		Milk.....	6
Stewed.....	12	Cream Soda.....	6
Fried.....	15	Sarsaparilla Soda.....	6
Panned.....	25	Lemon.....	6
Oyster Patties.....	12	PASTRY.	
COLD MEATS.		Mince Pie.....	6
Corned Beef.....	12	Apple Pie.....	6
Ham.....	12	Cranberry Pie.....	6
Tongue.....	18	Cocoanut Pie.....	6
Chicken.....	25	Sponge Cake.....	

SUNDRIES.	
Hard Boiled Eggs, 3c. each.	Cod Fish Cakes..... 12
Soused Pigs Feet, 6 "	Cup Custard..... 6
	Bread and Butter, 6.

Please report to the conductor any inattention on the part of the waiters.

KINGSLEY & CASSADY, Proprietors.

Of course the present, being the first experiment of the kind as yet tried, fails in many respects to come up to the standard of perfection. But judging from the amount of patronage bestowed upon it by the passengers of the train, we should conclude that it will prove a decided success.

The following is a report of the amount of coal transported over the Delaware, Lackawanna and Western Railroad for the week ending Saturday, March 29:

	Week.	Year.
	Tons. Cwt.	Tons. Cwt.
Shipped North.....	5,518 19	51,544 19
Shipped South.....	15,746 13	153,692 08
Total.....	22,265 12	205,237 07
For corresponding time last year;		
	Week.	Year.
	Tons. Cwt.	Tons. Cwt.
Shipped North.....	4,331 08	45,760 17
Shipped South.....	13,422 18	149,716 15
Total.....	17,754 06	195,476 11

MONETARY AND COMMERCIAL.

The demand for money is quite limited, although there has been a little more active employment of balances for a day or two past; yet there is a considerable surplus of unemployed capital seeking investment, and first class paper is in demand at regular rates.

The supply of exchange is short of the demand, and demand Treasury notes are being used in the transmission of balances to the East. This is done at a slight saving over the cost of Exchange. Quotations are:

	Buying.	Selling.
New York.....	par@1-10	1/2 prem.
Boston.....	par@1-10	1/2 prem.
Philadelphia.....	par@1-10	1/2 prem.
Baltimore.....	par@1-10	1/2 prem.
Gold.....	1 1/2 prem.	2@2 1/2 prem.

Toward the close of the week general business was characterized with greater activity. Grocers are engaged filling small orders. Molasses is held at a slight advance, and Sugars are firmer.

Flour is steady, but dull, with a local demand only. Superfine is held at \$4 20. Wheat is without change; but little doing, and steady at 98@105c. for White, and 90@95c. for Red.

Oats are in good demand at 30@31c., and even higher rates could be obtained for extra prime lots for seeding purposes. Corn is held at 33c., although the distillers are paying only 32c. Prime Barley is bringing 68@70c., and Rye is dull at 52c. Whisky is dull at 19@20 cts.

Lard is held at 7 1/2@7 3/4; some sales of city has been made at 7 3/4. The demand for Mess Pork has improved, and it has an upward tendency; quotations are for country brands \$10 40; city, \$10 50@10 75. Bacon Sides at 5 1/2@5 3/4. Shoulders at 3 1/2@3 3/4.

CHICAGO AND NORTH-WESTERN RAILROAD.

The earnings of the Chicago and North-Western Railroad for the past eleven months have been:

	For February, 1862.	1861.	For 11 months, April 1 to March 1.	1861-2.	1860-1.
Passenger.....	\$20,271 46	\$13,149 94	\$281,245 72	\$221,546 72	
Freight.....	26,282 27	33,282 29	477,079 44	413,486 57	
Express.....	807 03	731 25	8,933 36	8,043 75	
Mail.....	1,695 83	1,416 66	18,142 03	16,758 39	
Miscellan's.....	46 76	70 67	994 71	949 94	
Mil'ge of cars.....	.....	.....	4,075 40	.....	

Totals \$49,103 35 \$48,650 81 \$790,470 09 \$660,785 28

The following is the statement of the income account:

Balance to credit of Income Account, as per Report, to April 1, 1861.....	\$323,580 64
By gross earnings from April 1, 1861, to March 1, 1862:	
From Passengers.....	281,245 15
From Freight.....	477,079 44
From Express.....	8,933 36
From Mail.....	18,142 03
From Milage of cars.....	4,075 40
From Miscellaneous.....	994 71
Less for operating expenses from April 1, 1861, to March 1, 1862, as per statement attached	395,650 48
Less for interest on Flagg Trust Bonds, due July 1, 1861, and Jan 1, 1862.....	19,600 00
Less for interest on Preferred 1st Mortgage Bonds, due Aug. 1, 1861, and Feb. 1, 1862.....	36,989 00
Less for interest on Appleton Extension Bonds, due Aug. 1, 1861, and Feb. 1, 1862.....	12,880 00
Less for interest on debt.....	10,818 63
Less for exchange.....	4,802 03
Less for discount on currency.....	9,536 67
Less for insurance.....	2,766 15

Less for on account of Belleville accident.....	1,882 56
Less for expenses of Directors.....	67 10
Less for expenses of New York office.....	2,125 77
Less for taxes.....	22,179 94
Leaving surplus of earnings over operating expenses, interest on bonds, exchange, &c., from April 1, 1861, to March 1, 1862.....	217,171 88
Leaving balance to credit of income account, being excess of earnings over operating expenses, and amount paid for interest on bonds, exchange, &c., from June 1, 1859, to March 1, 1862.....	540,752 52
Unfunded debt.....	269,606 52

The earnings of the Milwaukee and Detroit Railroad from Jan. 1 to March 29, 1862, were; \$136,489, 48, against 102,805 15 for the same time in 1861.

ERIE RAILWAY.

Great Broad Gauge, Double Track and Telegraph Route

TO

NEW YORK, BOSTON,

AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston. Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

feb 6. CHARLES MINOT, Gen'l Sup't.

N. W. BALDWIN,

MATHEW BAIRD,

M. W. BALDWIN & CO.

ENGINEER'S

BROAD AND HAMILTON ST.

Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring). Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

419 y

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE-INDIANA. POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily for the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other.

FIRST TRAIN-5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN-2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN-5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M.; Chicago at 6:00 A. M., connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.

W. H. L. NOBLE,

General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

KNOX & SHAIN, Engineering and Telegraphic

INSTRUMENT MAKERS.

218 WALNUT ST., PHILADELPHIA.

(Two Premiums 410 1 by Franklin Institute.)

OHIO & MISSISSIPPI

RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENNES, Cairo, and St. Louis.

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:30 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:30 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:30 P. M.

RETURNING.—Mail Train Leaves East St. Louis.—(Sundays excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M. arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office No. 5 East Third street; No. 1 Burnet House corner of north-west corner of Front and Broadway; Spencer House office; and at the Depot corner of Front and Mill Streets.

G. B. McFELLAN, Gen'l Superintendent

Novemb 11th, 1861.

1861. 1861
FAST TIME.
LITTLE MIAMI
AND
COLUMBUS AND XENIA
AND
CINCINNATI, HAMILTON & DAYTON
RAILROADS.

On and after SUNDAY, Nov. 10. 1861, Trains depart as follows:

7:30 A. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Richmond, Indianapolis and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express—From Cincinnati, Hamilton and Dayton Depot—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot; and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,
General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

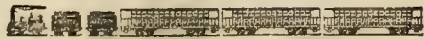
T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
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CINCINNATI O

W. MORRILL **G. B. BOWERS**
MORRILL & BOWERS,
(Successors to and members of the late firm of
O. WASON & CO.)
CLEVELAND, OHIO,

Are prepared to execute all orders or
Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.
Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.
Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

1862. 1862.
Pennsylvania Central R.R.
285 MILES DOUBLE TRACK.



(With its Connections)
IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
ONE TRAIN RUNS DAILY (430 MILES.)
VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.
ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
D. A. STEWART, Freight Agent, Pittsburgh.
CLARKE & CO., Transfer Agents, Pittsburgh.
R. C. MELDRUM & CO., Madison, Indiana.
J. E. MOORE, Louisville, Ky.
W. W. AIKMAN & CO., Evansville, Ind.
R. F. SASS, St. Louis, Missouri.
CLARKE & CO., Chicago, Illinois.
W. H. & E. L. LANGLEY, Gallipolis, Ohio.
G. B. NEAL, Parkersburg, Virginia.
HALL & CO., Marietta, Ohio.
H. S. PIERCE & CO., Zanesville, Ohio.
McDOWELL & McCORM, Portsmouth, Ohio.
R. McNEELY, Maysville, Ky.
J. P. JOHNSTON, Ripley, Ohio.
JOHN TODD, Covington, Ky.
G. L. HEATON, Cleveland, Ohio.
R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drivers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—(via Allentown)—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
L. L. HOUPP, Gen'l Ticket Agent, Philadelphia.
H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

BUSH & LOBDELL.
Chilled Railroad Car Wheel, Tyre,

—AND—
Railroad Machine Works,
Wilmington, Delaware,
MANUFACTURE

CHILLED WHEELS

—AND—
TYRES,
FOR RAILROAD CARS

AND
LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their
CELEBRATED WHEELS,

Either Single or Double Plate,
With or without Axles.

WHEELS FITTED
To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the
Most Reasonable Terms.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN
RAILROAD AND CAR

FINDINGS

—AND—
MACHINERY,
OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET
NEW YORK.

ALBERT BRIDGES. JOEL C. LANE.

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

through Distance 280 Miles;
42 Miles Shorter than any other Route
NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C., H. and D. Depot, at 7:30 A. M., 3:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-office and the Burnet House; No. 5 East Third-street; No. 169 Walnut street; Sixth street Depot.

Freight trains leave at 6:00 P. M. and run directly brought to Chicago without rebilling or transhipment.

JOHN BRANT, JR., Superintendent.
C. E. FOLLETT,
General Ticket Agent, Richmond, Ind.
S. W. CHAPMAN, Gen. Freight Agent,
Burnet House, Cincinnati, O.

W. M. F. HEWSON,
STOCK BROKER,

No. 21 West Third Street,
CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and makes collection

LOW'S RAILWAY DIRECTORY

FOR 1861

CONTAINING

THE NAMES AND RESIDENCES

OF THE

PRESIDENTS, DIRECTORS

AND

OFFICERS

OF ALL THE RAILROADS IN THE

UNITED STATES

they could be ascertained.

Published by James W. Low.
Price one dollar.Sent postage prepaid by mail for one dollar
and twenty cents.A few copies only for sale at the office
the Railroad Record,

WRIGHTSON & CO. 167 Walnut Street.

J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,

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CINCINNATI

McCALLUM, BRISTOL & CO.,
BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct
McCALLUM'S PATENT INFLEXIBLE ARCH
TRUSS BRIDGE, for Railroad and Highway purposes
at any point in Ohio, Indiana, Illinois, Missouri, Iowa,
Wisconsin and Minnesota on as favorable terms as any
other bridge sold in the most approved and perfect
manner. Parties desiring information, will please
apply to the firm at their Office 99 Third St., Cincinnati,
or to McCallum, Seymour & Hawley, No. 110 Broad-
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Railroad Machinery, Tires, etc.

-AND ALSO TO-

Rebuild and Repair Locomotives.

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Railroad, near the center of the State, possess superior
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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, APRIL 17, 1862.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
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Arrival and Departure of Trains.

Depart. Arrive.

Cincinnati, Hamilton & Dayton—		
Logansport & Chicago Express.....	7.30 A. M.	9.15 P. M.
1st R. I. C. T. & Sand. Mail.....	7.30 A. M.	5.45 P. M.
Dayton & Toledo.....	7.30 A. M.	9.15 P. M.
2nd. Hum. Accommodation.....	9.00 A. M.	8.10 A. M.
3rd. Richmond, Day & Bell'n Ex.....	3.30 P. M.	9.15 P. M.
4th Dayton, Tol. & Detroit Ex.....	5.30 P. M.	11.25 A. M.
Logansport and Chicago Express.....	7.30 P. M.	8.10 P. M.
Glendale Accommodation.....	7.30 P. M.	7.00 A. M.
6th Columbus Express.....	10.00 P. M.	7.40 A. M.
Little Miami—		
Morrow Accommodation.....	7.40 A. M.	1.30 P. M.
2d. Day Express.....	9.45 A. M.	6.50 P. M.
Camp Dennison Accommodation.....	3.15 A. M.	6.10 P. M.
3d. Columbus Accommodation.....	4.00 P. M.	10.31 A. M.
4th. Xenia Accommodation.....	5.50 P. M.	8.00 A. M.
Marietta & Cincinnati—		
1st. Mail Express.....	8.10 A. M.	10.05 A. M.
2d. Accommodation.....	3.30 P. M.	5.45 P. M.
Cincinnati, Wilmington and Zanesville—		
1st. Mail Express.....	9.45 A. M.	8.00 A. M.
2d. Accommodation.....	5.50 P. M.	6.45 P. M.
Ohio & Mississippi—		
1st. Mail Train.....	7.00 A. M.	10.05 P. M.
2d. Aurora Accom.....	3.15 P. M.	7.55 A. M.
3d. Express Train.....	7.20 P. M.	8.28 A. M.
Indianapolis & Cincinnati—		
1st. Mail.....	5.50 A. M.	9.45 A. M.
2d. Accommodation.....	2.45 P. M.	5.10 P. M.
3d. Chicago Express.....	5.00 P. M.	12.20 A. M.
Kentucky Central—		
1st. Express.....	6.38 A. M.	10.44 A. M.
2d. Accommodation.....	2.24 P. M.	7.10 P. M.
Cincinnati & Chicago Air Line—		
1st. Mail.....	7.30 A. M.	9.15 A. M.

COTTON.

Already some small installments of the staple has reached our ports from the interior of the late blockad up, and now but partially opened, cotton regions of the "Southern Confederacy." One little acquisitive German, who called at our office on other business, told us that he had exchanged his Confederate scrip for cotton at 8 cts. per pound, and had sold the cotton in our market at 25 cts. The little fellow was as *happy as a fool* over his speculation. The effect of the forward movement of the Western armies into the heart of rebeldom, and the clearing of the bosom of the "Father of Waters" from the bristling batteries erected by treason, will before long bring a stream of the staple up the Ohio that will very materially reduce its price in the markets of the world. The order of the rebel congress to burn the accumulated crop, and the proposed requisition not to plant a crop the present season, will be no more regarded, (except in districts in the immediate presence of rebel armies,) than if such requisitions had never been made. Men not engaged in the fight, not politicians by trade, men who do not expect to be made dukes or lords by the establishment of a *strong aristocratical government*, when assured of their constitutional rights, and protection in their persons and property, will on Southern soil, as in most climes in the world, pursue that course that is, in their judgment, best calculated to secure what they have got, as well as add to their future store.

It can not be long before the Federal armies will have secured liberty and freedom of action to the entire of Tennessee, the northern half of Mississippi and Alabama and the northwestern portion of Georgia, together with all their avenues of trade, and as the New York Economist truly says, "A market for cotton is at once afforded for their cotton; and railroads and rivers will be open for conveying it to the North without danger of rebel interruptions. It requires no elaboration of argument to show that, under such circumstances, the supply of cotton by the interior routes must soon be important enough to affect materially this branch of trade. Nor is this all. Indications point to the probability of soon possessing also a large slice of cotton territory along the coast. The State of Georgia is to be penetrated from the coast.

The latest advises from the Gulf fleet report that an expedition was ready to start against Apalachicola, with a certain prospect of the easy capture of that port. It is not impossible that a considerable amount of cotton may be found there. Several months since many thousand bales were crowded on the wharves, and it was found impossible to prevent its continual arrival. Whether or not this may fall into our hands, the more important fact remains that the possession of this

port gives us command of the Chattahoochee River, which is navigable to Columbus, 430 miles into the interior. This gives us access to the finest tract of cotton country in the State of Georgia. The surface of cotton land, drained by the Apalachicola river and its tributaries, the Chattahoochee and Flint rivers is estimated at 20,000 square miles. It is unnecessary to speculate on the probable results of the attack on New Orleans. Between Porter's Mortar fleet in front and possibly the mortar fleet of Foote in the rear, that city is virtually ours. Sufficient is already accomplished to justify the expectation that Southern cotton will soon cease to be so scarce as at present in Northern ports. The cotton states are tapped both at their Northern and Southern extremities,—both in the interior and on the coast,—and if the fleecy stream does not soon flow freely, the event will be contrary to every reasonable anticipation.

The supposition that the planters will remove their cotton into the interior, out of the reach of our advancing armies, is not to be entertained with any show of reason. Our forces will drive the rebels before them too rapidly to admit of any such movement. The rebel generals have appropriated to their use a large portion of the means of transport necessary for such an operation, should it be attempted. It is begging too much of the question, to take for granted that the planters would co-operate in such a course. They are aware that, by keeping this cotton at home, they would be able to sell it at good prices under federal auspices; whilst if they allow it to be sent to some common rendezvous, under the protection of the rebel army, it might fall into our hands as a prize of war, and they never receive a cent of compensation. They have, therefore, the choice of getting ready money for the crop, or losing it *in toto*. With the miserable assurances that the rebels can now give for protecting from capture cotton assigned to them, it is not difficult to divine which of these alternatives the planters will adopt. The merchants of New Orleans ought to be good judges of the disposition of the planters in this matter; and their opinion has already reached us. A leading New Orleans journal recently reported that the prospect of the blockade being raised by the federals had created a general improvement in produce, and that merchants were confident of a speedy resumption of trade with the surrounding country. The attempts to influence the cotton market by raising the cry that the rebels will burn the crop, and that the planters will refuse to sell it, are doomed to a speedy refutation by patent facts. In a very short time no merchant will be foolish enough to believe that the Southrons love their cotton less than they love rebellion and ruin."

The last phase of the United States Tax Bill is to place a tax of *ten cents* upon each \$100 insured.

TOLEDO AND WABASH R.R. CO.

This road has shared in the good fortunes of nearly all the Western roads in a large increase of freight traffic, and a consequent improvement in its financial condition. The increased revenues for the past fiscal year are \$150,513 28 over those of the previous year, with an increasing and growing traffic that fully equals their capacity to transact.

The capital of the Company, and which primarily represents the cost of the railway and equipment, amounts to \$8,284,595 36. The general stock is composed of 27,413 shares of fifty dollars each, amounting to \$1,370,650, and the preferred stock of 17,174 shares of fifty dollars each, amounting to \$858,700; making a total stock capital of \$2,229,350.

The funded obligations of the Company consist of \$3,400,000 first mortgage bonds, \$2,500,000 second mortgage bonds, and \$180,705 sinking fund bonds. Of the issue of first bonds \$900,000 are secured by an indenture of mortgage upon that branch of the road and equipment lying in the State of Ohio, and \$2,500,000 upon that branch in the State of Indiana; the former being entitled the Toledo and Illinois R.R. Bonds, and the latter the Lake Erie, Wabash and St. Louis R.R. Bonds.

The second mortgage bonds were issued by the Companies organized in the year 1858, and which became the owners, by purchase, of the franchises and also the personal and real property of the road, in pursuance of a decree and order of Court for the sale thereof. Of this issue of bonds, \$1,000,000 are secured by an indenture of mortgage upon that division of the road and equipment in the State of Ohio, and \$1,500,000 upon that division in the State of Indiana: the first named emission being designated the second mortgage bonds of the Toledo and Wabash R.R. Co., and the last, the second mortgage bonds of the Wabash and Western R. W. Co.

The respective first and second mortgages, upon which the foregoing issue of bonds is predicated, constitute a lien upon the franchises and entire real and personal property of the Company, acquired and to be acquired, rateably apportioned between the States in which the same is situated, and are the only mortgage liens now existing upon the road.

The sinking fund bonds are a funded obligation, created by the present Company, and for the sole purpose of retiring coupons numbers two, three and four of the second mortgage bonds, maturing on the 1st day of November, 1859, and the 1st days of May and November, 1860. The total amount of these bonds, authorized to be issued, was \$262,500, that sum being the aggregate of the second mortgage coupons to be retired: however, it should be here stated, that inasmuch as the Company canceled the coupons attached to its unissued second mortgage bonds, the originally authorized issue of sinking fund bonds

became necessarily reduced; and, accordingly, under such cancellation, the total issue will remain permanently fixed at \$249,112 50. There have been thus far executed and issued of these bonds, for the redemption of the coupons designated, \$180,705, leaving a residue of \$68,407 50 to be issued for those still outstanding.

The remaining element of capital liability comprises the funded and unfunded coupons, numbers eight and nine, originally attached to the first mortgage bonds, and which matured on the 1st day of August, 1857, and the first day of February, 1858. In pursuance of the plan originally devised for the adjustment of certain accrued interest indebtedness, the option was given to the holders of these first mortgage coupons to merge them into second mortgage bonds, or into funded notes of the Company. A portion of the holders elected the latter security, and accordingly the Company have executed and issued in payment of said coupons its promissory notes, bearing dates November 1st, 1858, and March 1st, 1859, bearing seven per cent. interest and the principal thereof, made payable in five equal annual installments, commencing on the first day of November, 1860. The aggregate amount of these notes, thus far issued, is \$139,643 92, and the first installment of principal having been paid according to the tenor thereof, there now remains a net principal still outstanding of \$111,894 91. For the redemption of the coupons yet unrepresented, a further liability exists upon the Company to issue its notes for the sum of \$8,046 45, which will include the interest accrued on such coupons to the dates of the notes issued therefor.

The various elements of stock and funded obligations of the Company, hitherto analyzed and constituting the present capital, may be briefly aggregated as follows:

General Stock.....	27,413 shares	\$1,370,650 00
Preferred Stock.....	17,174 "	858,700 00
First Mortgage Bonds....		3,400,000 00
Second Mortgage Bonds..	\$2,500,000	
Less amount unissued..	115,400	
		2,384,600 00
Sinking Fund Bonds....		180,705 00
First Mortgage Coupons		
Funded Notes.....		111,894 91
First Mortgage Coupons		
unfunded.....		8,045 45
		\$8,284,595 36

FINANCIAL.

The total revenues of the Company for the current fiscal year, derived from all sources, are \$1,012,235 72, showing a gratifying increase of \$150,513 28 over those of the preceding year.

The following statement presents a brief analysis of such revenues:

From Passenger transportation.....	\$223,386 13
From Freight ".....	717,812 04
From Mail ".....	24,275 00
From Express ".....	16,702 48
From all other sources.....	30,060 07
	\$1,012,235 72

The total expenditures on account of operating the road for the current fiscal year, which include all renewals of iron, chairs, rebuilding of bridges, &c., and which will be

found minutely analyzed in schedules appended to this exhibit, aggregate as follows:

To General Superintendent for monthly transportation expenses.....	\$543,862 71
To Treasurer for taxes, rents, insurance, salaries, agencies, &c.....	67,813 53
	\$611 676 24

There is, therefore, remaining after paying all the operating and renewal expenses of the road an actual net surplus of..... \$400,559 48

This net surplus of revenue, accruing from the earnings of the fiscal year under consideration, has been applied to the purchase of additional cars and equipment for the road, the erection of grain and freight buildings, (all of which are properly chargeable to capital, they being an addition to the original value of the line,) together with the payment of interest on the funded debt of the Company, and the further adjustment of some minor accruing obligations, as will more clearly appear in the following statement:

For equipment, buildings, cars, &c.....	\$57,712 28
For contract of Stebbins & Co., assumed.....	2,000 00
For additional right of way obtained.....	171 00
For unpaid claims of previous year.....	635 25
For interest on funded debt, &c., viz:.....	
First mortgage coupons.....	\$232,299 00
Funded coupons, (notes,).....	11,715 24
Sinking fund coupons.....	12,646 66
Installment of principal on notes, 27,749 01	
Coupons of previous years paid, ..	2 358 41
	286,698 32
Amount applied to reduce income balance,....	23,342 03
	\$400,559 48

PASSENGER TRAFFIC.

The statistics, relating to the movement of passengers during the year under review, do not exhibit as gratifying results as those relating to the freight traffic. The gross revenues derived from this branch of operations are \$223,386 13, of which amount there has been received on account of local or way business \$144,920 98, and from foreign or through business \$78,465 15. These results show a falling off of \$10,159 68 as compared with those of the last fiscal year.

The policy of withdrawing one of the two passenger trains, heretofore run daily over the road, has been for quite a period the subject of discussion by the Board: however, so long as there was a surplus of power which could be used advantageously in no other way, it was deemed inexpedient to try the experiment. But during the latter part of the current year, it became evident that on account of the heavy amount of freight crowded upon us, greatly in excess of our ability to move, we could employ our locomotives to much greater profit and advantage in that traffic, and accordingly one train was withdrawn. The immediate effect of this arrangement is only measurably apparent: however, the falling off of \$4,571 89 in passenger revenues of the month of August, as compared with the corresponding month of the previous year, discloses to some extent its consequences, and hence partly explains the declension of the gross revenues obtained for the year.

The withdrawal of one train will not, undoubtedly, diminish to any serious extent the earnings derived from way business, since the requirements of the local travel can be amply provided for by mixed and freight trains; bu

the through travel must be considerably affected from this cause, especially so long as competing lines run fast trains twice or thrice daily, thereby offering superior inducements to the traveling public.

The movement of large bodies of troops during the year has had a very favorable influence upon the passenger revenue of many of the East and West thoroughfares; but as these movements have been from and to points not reached by us, and in a direction generally crossing our route at right angles, we have derived no pecuniary benefit therefrom, but rather have sustained an indirect injury.

FREIGHT TRAFFIC.

The revenues of the road from the transportation of freight for the year are \$717,812 04, as against \$568,070 53 in the preceding year, showing a favorable increase of \$149,741 51.

The most encouraging feature of this increase is that it has been derived from the legitimate and natural business of the line, and not as has been the case with other roads, from a temporary diversion caused by the closing of the Mississippi river and southern lines of railroads. In fact, the closing of these great thoroughfares has so far operated to our prejudice, instead of advantage, since the carrying capacity of our principal Eastern connections has been greatly overtaken by the unusual amount of South-western freight suddenly thrown upon them, and consequently our facilities for forwarding from Toledo have not been nearly equal to our requirement.

The completion of the bridge of the Quincy and Toledo Railroad over the Illinois river at Meredosia, during the past winter, removes a serious obstruction to our connections with Quincy, and which has, hitherto, absolutely prevented the shipments of heavy and bulk freights. Immediately on the opening of this bridge for the passage of trains, a large grain traffic commenced from the various stations west of Meredosia, and, also, an important rolling freight business from the city of Quincy and towns contiguous thereto. In this connection it is a subject of regret that for want of transportation facilities, only a small portion of the freight offered, during the year, could be transported, and hence it has been without our power to fully determine the actual value and importance of this new auxiliary connection. However, the large traffic already developed sufficiently demonstrates the fact, that when ample equipment is provided, the business to be derived from this route will at all times constitute a prominent and staple element in our freight traffic, and largely contribute to our current revenues.

The steady growth and development of the grain traffic of the road is highly gratifying, and the large increase in freight for the year is chiefly owing to this cause. During the present year there have been transported about 4,200,000 bushels of grain, as against

2,971,000 in the previous year and yet the Company have by no means possessed sufficient facilities to move all that has been offered for shipment. Owing to the want of cars and the still greater want of elevator capacity at Toledo, a large share of the grain business accumulating upon the Great Western and Logansport and Peoria routes has been forced off to Chicago, notwithstanding the preferences of those wishing to forward were strongly in favor of Toledo as a market. It is of the highest importance that our Company should provide facilities for transporting and storing grain, greatly superior to those now possessed, and, also, that particular care and effort be bestowed in fostering and promoting this most important and staple branch of our traffic. The development of the business of the road thus far forces the conviction that the cereal products of the country tributary to the line are to constitute the real elements of its success and future prosperity, and it is equally apparent that the vast extent of these products, if fully secured upon the road, will be sufficient to tax its utmost capacity, and demonstrate the ability of the Company, when free from financial embarrassments, to make ample and rewarding returns upon the property invested.

The tonnage of rolling freight moved has far exceeded, in amount, that of any previous year, and likewise continues to steadily increase with each succeeding month. The tonnage of the more staple commodities, such as flour, beef, pork, and highwines, during the year, has been unprecedentedly large, and what is more gratifying, the rates obtained have been more satisfactory and remunerative than ever before, encouraging the hope that the period of violent and ruinous competition, between rival routes for this class of traffic, has passed away. The recent erection of a new and commodious freight house at Toledo has done much to increase and attract this class of freight to the road; indeed it is believed that no corresponding investment of the Company has been equally effective in popularizing the road with the shippers of rolling freight. The advantages of this additional storage room to our business, especially during the latter part of the season, has been inestimable, and it is apparent, if the capacity of the building was doubled, the Company would soon be reimbursed by a large increase of business and other benefits more than equal to such an outlay.

In connection with this subject of storage accommodations, some further reference should be made to the pressing and imperative necessity of providing more extensive and adequate room for elevating and storing grain at Toledo. The buildings and storage capacity hitherto furnished for the accommodation of this most important traffic of the road have been meagre and totally insufficient, inasmuch that it has been no unusual occurrence for the

grain houses to be completely blocked up, a large share of the equipment of the road employed for storing grain at Toledo, and hence rendered useless at a period when most urgently required, all of which produced its inevitable results—a serious suspension and paralysis of the business of the Company, and dissatisfaction if not positive injury to the shippers. The parties who originally contracted to erect a grain building, and to provide additional ones sufficient to meet the requirements of the road, have, unfortunately, wholly failed in making good their covenants, whereby the serious blockade of 1860, and the more disastrous one of 1861, ensued, resulting greatly to their prejudice and injury, as well as to that of the Company. In view of the inconveniences and losses already sustained in consequence of these deficiencies and omissions, it is to be hoped that some immediate and effectual measures may be taken to remedy the evil, in order that this important business may be no longer depressed and trammelled as hitherto, but rather encouraged and developed, by providing not only such facilities and accommodations as are really essential and necessary, but, if possible, such as shall be superior to all other competing routes.

OPERATING EXPENSES.

The total expenses for operating the road during the year have been \$611,676 24, of which amount there has been disbursed through the General Superintendent \$543,862 71, and directly by the Treasurer 67,813 53.

The expenses of this department of operations have been considerably increased over those of the preceding year, owing to the imperative necessity of making some important renewals of the track, and, also, the rebuilding of other original structures. These disbursements for renewals during the year have exceeded \$90,000, and having been paid as monthly operating expenses have become merged into and gone to swell that account somewhat beyond the figures of the previous year. Among the most prominent and expensive renewals made may be mentioned the purchase and laying down of 670 tons of new iron, the taking up and re-rolling of 500 tons of the old iron, making thereby over twelve miles of new track, besides 2,700 bars which have been taken up, thoroughly repaired, and restored to the track. There have been used 21,000 of superior wrought iron chairs, 681 kegs of spike, together with 73,000 cross ties, put into the track to replace those that had become partially decayed and useless. In addition, several of the bridges have been either wholly rebuilt, or a large portion of the old timber removed and new substituted.

The operating expenses have also been further considerably increased by the rebuilding of cars and other general renewals made in the equipment of the road. Twenty five box cars, thirty-one platform cars, and twelve hand cars have been entirely rebuilt, and

some sixty box cars partially rebuilt, besides a large number refloored and re-roofed, and otherwise permanently restored. Three of the passenger cars and one baggage car have been rebuilt and refitted, and one night car rebuilt and upholstered in the newest and most thorough manner. One locomotive and one tender have been rebuilt throughout, and twelve locomotives have had new boilers supplied, rendering them for all practical purposes as good as when placed upon the road. The flues of fifteen locomotives have been taken out and replaced by new ones; seven tenders supplied with new frames; six locomotives furnished with new or renewed tires; besides twenty-six locomotives have been thoroughly overhauled and partially renewed.

Treasurer's General Balance, Aug. 31, 1861.

	Dr.	
To Road Bed and Equipment.....	\$8,244,593 36	
To General Post Office Department.....	3,933 33	
To U. S. Military Service.....	1,126 24	
To Bills Receivable.....	3,208 19	
To Toledo, Logansport & Burlington R.R. Co.	11,454 91	
To Quincy & Toledo R.R. Bonds.....	3,040 00	
To Suspended Interest Account, No. 1, 2d Mortg. coupons of Nov. '59, and May and Nov. '60, to be funded.....	68,407 50	
To Suspended Int. Acct., No. 2, 2d Mortg. coupons of May, 1861, to be funded.....	83,037 50	
To Bank of the Republic, New York.....		
To amt on deposit for payment of coupons	38,516 02	
Fuel on hand and prepared for use.....	20,834 37	
Balance of Income Acct brought forward...	150,364 48	
	\$8,668,477 97	Cr.
By General Stock.....	\$1,370,650 00	
By Preferred Stock.....	858,701 00	
By First Mortgage Bonds.....	3,400,000 00	
By Second Mortgage Bonds.....	\$2,500,000	
Less amount not issued.....	143,400	
	2,354,600 00	
By Sinking Fund Bonds.....	180,705 00	
By First Mortgage Coupons Funded.....	111,894 91	
By First Mortgage Funds Unfunded.....	8,945 45	
By Second Mortgage Coupons Unfunded.....	68,407 50	
By Coupons of Feb. 1, 1859, 1st Mortg. Bonds	175 00	
May 1, 1859, 2d " " " "	871 50	
Aug. 1, 1859, 1st " " " "	245 40	
Feb. 1, 1860, 1st " " " "	490 00	
Aug. 1, 1860, 1st " " " "	525 00	
Nov. 1, 1860, Sink. F'd " " "	106 52	
Feb. 1, 1861, 1st Mortg. " " "	5,140 00	
May 1, 1861, 2d " " " "	83,037 50	
May 1, 1861, Sink. F'd " " "	1,633 96	
Aug. 1, 1861, 1st Mortg. " " "	119,000 00	
By Bills Payable.....	53,247 88	
By Cash Account.....	49,422 95	
	\$8,668,477 97	

Names and Residences of the Directors and Officers of the Company.—Azariah Boody, New York; Joseph B. Varnum, New York; James Spears, Lafayette; George D. Morgan, New York; Isaac H. Knox, New York; Rob't Brackenridge, Ft. Wayne; Hector Morison, New York; Francis W. Tracy, Buffalo; Henry A. Kent, New York; William Baker, Toledo; James T. Soutter, New York; John G. Richardson, New York; George Cecil, Logansport; Warren Colburn, Toledo; Wm. Kent, Williamsport.

Officers.—Azariah Boody, President, New York; Warren Colburn, Vice-President, Toledo; John N. Drummond, Secretary and Treasurer, Toledo; Charles H. Peirce, Transfer Agent, New York.

Officers on the Line—George H. Burrows, General Superintendent, Toledo; Chas. Knox, General Freight Agent, Toledo; J. E. Carpenter, Acting General Ticket Agent, Toledo; James E. Baker, Assistant Superintendent, Lafayette; W. F. Ray, Master Mechanic, Fort Wayne.

U. S. CIRCUIT COURT, NORTHERN DISTRICT OF OHIO.

MARCH TERM, 1852.

Christopher S. Toppan *vs.* The Cleveland, Columbus and Cincinnati Railroad Company.
In debt.

OPINION OF THE COURT.—WILSON, Judge.

This case stands upon a demurrer to the first and second counts of the plaintiff's declaration.

Many grave and important principles were discussed by counsel in the argument some of which it is deemed unnecessary to consider, in determining the issue of law raised by the demurrer.

The suit is brought against the defendant, upon its guarantee indorsed upon sundry bonds of the Columbus, Piqua and Indiana Railroad Company. These bonds bear date April 1st, 1854, and are all of the same tenor and effect, with interest coupons attached.

The plaintiff became the owner and holder of the bonds and coupons, so guaranteed, on the 4th day of August, 1854, by purchase in the regular course of business, and for a valuable consideration.

It is alleged that the Columbus, Piqua and Indiana Company is insolvent, and that certain of the coupons are due and remain unpaid.

Both the first and second counts of the declaration contain the averments that the Columbus, Piqua and Indiana Company was a corporation created and organized under the laws of Ohio, empowered to issue bonds, notes and other evidences of debt, to borrow money at 7 per cent interest, and authorized to construct, maintain and run a railroad from Columbus, Ohio, to the west line of the State.

That the Cleveland, Columbus and Cincinnati Company is a corporation of like powers, organized under the laws of Ohio, and authorized to construct, maintain and run a railroad from Cleveland, in Cuyahoga county, to Columbus in Franklin county, Ohio, and being interested in the construction of the Columbus, Piqua and Indiana Road, and being authorized by the laws of Ohio so to do, did indorse and guarantee the bonds of the last named Company as aforesaid.

This statement of the case, though much abbreviated, is nevertheless deemed sufficient for a full apprehension of the questions of law raised by the demurrer.

It is insisted by the defendant's counsel:

1st. That this contract of guarantee is not negotiable.

2nd. That no sufficient consideration, for the undertaking, on the part of the defendant, is averred; and,

3rd. That the defendant having no power, under its charter, to make the guarantee, the legal authority, and the facts and circumstances, contemplated by the act of 1852, by which such power could be obtained, should be fully set forth upon the record.

"A guarantee," said Verplank, in McLaren *vs.* Watson's ex's in its legal and commercial signification, "is an undertaking to be answerable for the payment of some debt, or the due performance of some contract by another, who himself remains liable for his own default. If the guarantee be of a prior debt or contract, then there must be some good consideration received by the guarantor, and such consideration should be averred in the pleadings and proved on trial."

But where the guarantor holds out his engagement of secondary liability as an inducement to any one who may, upon the faith of

that promise, give credit in any way to a party, then, if there be no special consideration of benefit received by the guarantor, yet the same consideration of debt or damage which supports the claim against the principal in default equally applies to and supports the right of action against the guarantor.

Hence, as the guarantee in this case is a contract collateral to the bond, there is no force in the objection, that a distinct consideration should be averred.

It could be different, had the guarantee been made after the execution of the bond and its delivery and receipt as a complete contract.

But here the record discloses the fact that the guarantee was made and indorsed on the bond before its issue and delivered by the Columbus, Piqua and Indiana Company. It was done for the benefit of that Company, to add strength to its paper, and to induce third persons to take the bonds and to advance money upon them. We are clearly of the opinion that the credit thus given to the Columbus, Piqua and Indiana Company is, of itself, a good and sufficient consideration to support the contract of guarantee. 8 Cush. 12 Wend. 381. 26 Wend. 3425. Burr, 1662.

Again it is urged, that this guarantee is a special contract—a mere chose in action, and therefore not negotiable. It is claimed to be analogous in principle to an ordinary mercantile guarantee of a debt or purchase, where the primary liability can go no further than the first parties.

The ordinary mercantile guarantee is a contract to become liable for, another for some specific debt in the hands of a creditor, whose right to sue and enforce it cannot be transferred. In such a case, the offer of guarantee is only of some specific transaction, which becomes final as to the parties, when the offer is accepted.

In the language of the court in *Watson vs. Dodson*, (3 Carr and Payne 163) "such a guarantee will inure to the benefit of those to whom or for whose use it was first delivered."

But the rule of law is different where the guarantee is for the payment of negotiable paper. That is a positive undertaking to become liable in case of default of the original parties to the bond, note or bill; and such undertaking is held out to every person who may, on the faith of it, become the legal holder of such paper. Not (say the authorities) that the guarantee is, in itself, negotiable as a separate contract; but that it is a collateral promise to any and each person, in his turn, who may give credit to a negotiable bond-note or bill coupled with such guarantee.

In *Kitchel vs. Burns*, (24 Wend 456,) the Supreme Court of New York declare, that on a guarantee indorsed upon a note, whereby the payment of the note is guaranteed to a third person or bearer, on action lies by any subsequent holder in his own name. And in "Story on Contracts" (738) the author broadly declares the law to be, that "where a general guarantee is made upon the face of a promissory note or bill of exchange and is not limited to a particular person, or restricted in its terms, but purports to be guarantee to the payee or his order, or to the bearer, the guarantee is as negotiable as the bill or note, and accompanies it to the hands of every holder." (26 Wend. R. 425; 10 *ibid.* R. 202—557; 3 Greenl. R. 233; 6 Conn. R. 315; 12 Peter R. 207; 16 East R. 355; 3 Carr and P. 162.)

Now, the bonds, in question, of the Columbus, Piqua and Indiana Company, are made negotiable by distinct and unequivocal terms. The language employed is—

"And the said Company further agree, that this obligation and all rights and benefits arising therefrom, may be transferred by general or special indorsement, or by delivery as if the same were a note of hand payable to bearer.

The defendant's guarantee of payment, indorsed upon the bond, is not limited to any particular person, nor is it restricted in its terms. The obligation, on the part of the defendant, is, in legal effect, an undertaking to pay the interest and principal, as they severally become due in default of the maker, and such undertaking extends to any person who may have become the holder of the paper by advancing money on the strength of the indorsement. Such clearly was the purpose and effect, intended by the parties to the transaction.

We therefore hold, that, from the record in the case, it sufficiently appears, this guarantee was given for a good consideration; and also that it is negotiable, and as available in the hands of the holders as is the right to sue upon the bonds themselves.

It only remains to consider the third objection to the sufficiency of the pleadings, which is that the defendant having no power under its charter to make the guaranty, the legal authority and the facts and circumstances contemplated by the act of 1852, by which such power could be obtained, should be fully set forth upon the record.

The Federal Courts, sitting in any State, are bound to take judicial notice of the Statutes of such State. Hence, a party alleging a claim in his declaration, or a party setting up a defense in his plea under a public law, is not required to set forth the statute in the pleadings.

It is sufficient that the facts are stated which are necessary to bring the case within the operation of the statute, and to insist that upon those facts the right exists or does not exist. The court will then judicially notice the existence of the statute, and declare its legal effect upon the case as made by the pleadings.

The courts are in like manner bound to take judicial notice of the location of towns and cities, and the boundaries of counties, and of State lines.

There is still another principle of law which has application where one of the parties is a corporation, and contracts as such. And that is, that while corporations have no powers except those specifically granted, or such as are necessary for carrying into effect the powers expressly granted, yet the presumption of law arising in favor of such contracts is always in favor of their validity; or in other words, it will be presumed that the debt was due, or the obligation or other security was given in the lawful course of business, or until the contrary is shown.

This presumption, however, only arises in cases where it appears the corporation is empowered to contract under the authority of its charter or the laws of the State.

The 34th section of the "act to provide for the creation and regulation of incorporated companies in Ohio, (passed March 1, 1852), declares, that "any railroad company, heretofore or hereafter incorporated, may, at any time, by means of subscription to the capital of any other company, or otherwise aid such company in the construction of its railroad, for the purpose of forming a connection with said last mentioned road with the road owned by the Company furnishing aid; or any railroad company organized in pursuance of law, may lease or purchase any part or all of any

railroad constructed by any other company of said companies lines of road are continuous or connected as aforesaid, upon such terms and conditions as may be agreed on between said companies respectively; or any two or more railroad companies, whose lines are so connected, may enter into any arrangement for their common benefit, consistent with and calculated to promote the objects for which they were created: Provided that no such aid shall be furnished, nor any purchase, lease or arrangement effected, until a meeting of the stockholders of each of said companies shall have been called by the directors thereof, at such time and place, and in such manner, as they shall designate, and the holders of at least two thirds of the stock of such company represented at such meeting, in person or by proxy, and voting thereat, shall have assented thereto.

Here is the broad legislative grant of power to this defendant, to enter into an arrangement with another railroad company for their common benefit, consistent with and calculated to promote the objects for which they were created.

The question raised by the demurrer is, whether it was necessary for the plaintiff to aver in his declaration, that the aid or guarantee in question was given by the previous assent of two thirds of the stockholders of the company, at a meeting called by the stockholders for that purpose, in order to avoid the inhibition of the proviso contained in the act of 1852.

The averment in the declaration is—"which said guarantee was duly signed by the defendant, by its then president, who was authorized so to execute the same, and was afterward, to wit, (etc.,) duly ratified and confirmed by the stockholders of said company.

This is not a contest between a corporation and one or more of the stockholders, whose rights the proviso of the act was intended to protect. Nor is it a contest between a stockholder and a third person who claims rights under alleged illegal acts of the officers of the corporation.

It is a controversy between a creditor and the corporation itself, in which the latter repudiates its own acts, and seeks to avoid a liability created by itself. The defendant, in legal effect, admits its liability by executing the guarantee and sending it forth to the world challenging faith, credit and confidence in all who may be induced to act upon it.

It is a principle of law, of universal application, (and as just as it is general,) that admissions, whether of law or of fact, which have been acted upon by others, are conclusive against the party making them, in all cases between him and the person whose conduct he has thus influenced; and the principle is founded upon grounds of public policy, that a man shall not be permitted to repudiate his own representations. It was forcibly said by Mr. Justice Campbell in regard to the validity of this identical guarantee, that, "a corporation, quite as much as an individual, is held to a careful adherence to truth in their dealings with mankind, and can not by their representations or silence involve others in onerous engagements, and then defeat the calculations and claims their own conduct had superinduced." (Zabriskie vs. C. C. and C. R. R. Co., 23 How. R. 381.)

It is a legitimate presumption, then, that the defendant, in executing the guarantee, had complied with all legal requirements and regulations, and especially so, since it appears by the record that the obligation was given by order of the Board of Directors, and sub-

sequently ratified by the stockholders at a general meeting.

The plaintiff has not alleged in his declaration that the guarantee was given by the previous assent of two thirds of the stockholders, at a meeting called for that purpose. But, we think so far as third persons are concerned, in a suit against the corporation, that fact is wholly immaterial, and therefore need not be averred.

It is further objected by the defendant's counsel, that a traverse of law, and not purely a matter of fact, is tendered by the plaintiff's declaration.

It is said, that the allegation in reference to the execution of the guarantee, to wit, of "the defendant's being thereunto duly authorized by the laws of Ohio, etc.," is an attempt on the part of the pleader, to put in issue a mere legal conclusion.

The true test of the sufficiency of the pleadings undoubtedly is, whether the allegations in the declaration can be traversed by plea; for it is true, that a traverse should be taken on matter of fact, and not on mere matter or conclusion of law.

But where the *virtute cuius* raises a mixed question of law and fact, there may be a traverse, for that is the only mode by which the facts are to be settled on which the law depends.

Mr Sergeant Williams, says: "That where the words *virtute pretextu per quod*, etc., introduce a consequence from the preceding matter, they are not traversable; but that matter of law connected with fact, or rather matter of right resulting from facts, is traversable.

In the case of Barker vs. Mechanics' Ins. Co., (3 Wend R. 94,) the averment in the declaration was, that "John Franklin being the President of said company, and being thereunto duly authorized and acting within the scope of the legitimate purposes of the company, on, etc., made a certain promissory note.

The Supreme Court of New York held the averment good, and sustained the declaration.

In the case before us, we are of the opinion that the demurrer is not well taken, and should therefore be overruled.

Hitchcock, Mason & Estep, for Plaintiff.
Ranney, Backus & Noble, for Defendant.
Cleveland Herald.

—The Rock Island Railroad earned the first week in April:

1862	\$17,185	1861.....	\$19,294
Decrease.....			2,009

—The details of the earnings of the Galena and Chicago Railroad for the week ending March 31 are:

	1861.	1862.	Decrease.
Freight	\$19,793 33	\$11,243 40	\$8,549 95
Passengers.....	7,607 75	6,939 25	650 50
Mails, &c.....	1,430 83	1,250 00	180 83
Total.....	\$29,031 91	\$19,462 65	\$9,569 26
For the month, 1861.....			\$101,600 24
For the month, 1862.....			76,137 52
Decrease.....			\$25,462 65
Corrected earnings for the previous month.....			105,423 61

—The weekly statement of earnings of the St. Louis, Alton and Chicago Railroad from March 24 to 31, 1862, inclusive, were:

	1862.	1861.
Passengers.....	\$7,355 15	\$5,290 30
Freight.....	9,115 86	9,350 00
Sundries.....	855 73	819 53
Total.....	\$17,356 74	\$15,449 72
Increase in 1862.....	\$1,897 02	
Total this month to date.....	83,242 52	78,360 56
Total since Jan. 1.....	193,740 38	235,313 21

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	R to of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.		48	\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.	380		13,111,800	10,781,833	506,070	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do										"	2,500,000	6		1825	
do do										"	700,000	6		1820	
do do										"	1,125,500	6		1875	
do Washington Branch.....	Md.	30		1,650,000						"	1,000,000	6		1867	
Bellevue and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7		1866	
do do										2d	160,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	121	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,860	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	96		3,985,400	8,820,000		1,997,065	733,950	Dec. 31, 1860	1st Mortgage.....	450,000	6		1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	800,000	7		1864	
do do										2d	80,000	7		1865	
do do										3d	950,000	7		1825	
do do										4th	1,365,800	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	140,000	6		1855 & 1870	
do do										2d	600,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						3d	1,000,000	10			
do do										1st Mortgage.....	400,000	7			
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac).....	Wis.	104		2,897,750	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S.F. Gen'l 1st Mortgage.	1,250,000	7	41	Feb & Aug	
do do										2d	3,000,000	7	41	Feb & Aug	
Chicago and Rock Island.....	Ills.	53	175	5,603,000	1,397,000		1,164,018	455,963	June 1, 1861	1st Mortgage.....	2,000,000	6	11	May 1.	
Chicago, Burlington and Quincy.....	"	614	138	4,680,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S.F.	2,172,000	8	99	1870	
do do										" 2d " S.F.	813,000	8		1890	
do do										1st Mor. Chi. & Aur.	390,000	7		1867	
do do										2d " " "	303,000	7		1869	
do do										1st " Cent. Mil. Tract	39,000	7		1864	
do do										2d " " "	215,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	60		2,155,800	1,350,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000			1867	
do do										2d	950,000			1860	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d	532,000				
do do										3d	104,000				
Cleveland and Mahoning	Ohio.	68		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,509				
do do										1st Mortgage.....	850,000				
do do										2d	40,000				
Cleveland and Pittsburgh.....	Ohio & Pa.	18	196	In hands of Receiver.	4,918,325	653,821				3d	341,000	8			
do do										1st Mortgage M. L.	800,000	7	13	1860	
do do										2d " M. L. or 1st Ex.	1,185,000	7		1873	
do do										3d 2d Ex.....	1,165,000	7		1865	
Cleveland and Toledo.....	Ohio.	46	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	4th 3d Ex.....	1,154,000				
do do										1st Mor. Jan. 1st Div.	359,000			1867	
do do										1st " " 2d Div.	263,000			1872	
do do										2d " " "	265,000			1862	
do do										1st " Tol. Nor. & Clev	521,000			1863	
do do										2d " " "	293,300			1864	
do do										Junction Income..	44,500			1862	
do do										C. & T. Income..	300,000			1864	
Cleveland, Columbus and Cincinnati ..	Ohio.	109	135	4,746,100	519,000	4,201	1,255,003	604,888	Dec. 31, 1861.	1st Mortgage.....	519,000			1864 & 1890	
Cleveland, Painesville and Ashtabula ..	"	98		3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000			1861	
do do										2d	303,000			1862	
Columbus and Xenia.....	Ohio.	54		1,490,000	299,700	50,500	See L.	Miami.		Dividend.....	272,700			1860 to 1866	
Columbus, Piqua and Indiana	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666	2,512,000					2d	2,212,000	7			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000				
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000			1875	
do do										2d	1,000,000	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		966,061	1,219,100	249,668	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d	18,000				
Galena and Chicago Union.....	Ills.	69	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000		100	1862 & 1863	
do do										2d	1,320,000		99	May 1, 1875	
Great Western	Ills.	175		1,600,000	2,391,000		45,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report	75,000	63,141	13,573		Land Mortgage Conv.....	5,000,000		67		
Greenville and Miami.....	Ohio.	32		300,000	473,000					1st Mortgage.....	1,354,000	6	30	1873	
Hannibal and St. Joseph.....	Mo.	206		1,041,066	10,554,000	220,306	996,907	512,933	Sept. 1, 1860.	1st Mortgage.....	927,000	6		1873	
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	4,000,000	7	102	1869 & 1870	
Hudson River.....	N. Y.	35	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	2d	2,000,000	7		1870	
do do										3d	1,840,000	7	86	1875	
Illinois Central.....	Ills.	65	455	15,654,920	15,673,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000	7	93	1868	
do do										Construction.....	12,885,000	7		1875	
do do										"	4,115,000	6		1875	
do do										Debentures.....	42,740	7			
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	60,000	7			
do do										2d	578,000	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		Income.....	38,700	11		1866	
do do										1st Mortgage.....	500,000				
do do										2d	400,000				
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,093,284	9,936	277,932	36,773	Dec. 31, 1860.	Real Estate Mort.....	200,000	7			
do do										1st Mortgage.....	649,984	7			
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d	314,000				
Iron.....	Ohio.	13		118,865	50,000		No report								

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.		66½	\$ 1,970,937	\$ 3,501,000	\$ 43,361	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jelleville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860	1st	249,000			1861	
do	do									2d	392,000			1873	
Kentucky Central (Covington and Lexington).....	Ky.		99	Sold out under mortgage	2,930,060	337,532	426,408	227,534		1st Mortgage.....	160,000	6			
do	do									1st	260,000	7			
do	do									2d " Conv.	1,000,000	7			
do	do									3d	600,000	7			
La Crosse and Milwaukee.....	Wis.		300	In hands of Receiver.						1st Mortgage E. D.	904,000				
do	do									2d " E. D.	1,000,000				
do	do									1st Land Grant W D	4,000,000		12		
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report			1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.		29	514,433	130,000		108,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883	
Little Miami.....	Ohio.		65				1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000				
Louisville and Frankfort.....	Ky.		65	1,169,59	334,519		245,910	98,679	June 30, 1861	1st Mortgage.....	248,000				
do	do									1st Mortgage.....	2,400,000	7			
Louisville and Nashville.....	Ky.		268	5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000				
do	do									1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.		288	2,500,000	3,000,000	200,000	645,827	371,402							
do	do														
Madison and Indianapolis.....	Ind.		87	1,648,050	1,285,300	87,969	230,563	99,020	Dec. 31, 1860.	1st Mortgage	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.		203	8,561,213	190,408	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868	
do	do									2d	2,000,000	7			
do	do									3d	1,500,000	7			
do	do									Sterling Income..	333,000	4			
do	do									Domestic	928,617	7			
Michigan Central.....	Mich.		55½	6,057,784	7,963,489	125,000	2,126,099	910,169	May 31, 1861	1st Mortgage Sterling	467,489	6		1872	
do	do									1st " Conv.	500,000	8	100	1869	
do	do									1st " unconv.	250,000	8		1860	
do	do									1st " Dollar Conv.	2,500,000	8		1869	
do	do									1st " S. F. Conv.	4,153,000	8	93	1862	
Michigan South'n & North'n Indiana	Mich &		24½	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. S.	991,000		90	1860	
do	do									" Nor. Ind.	985,000		88½	1861	
do	do									" Goshen Line..	1,168,000		88½	1868	
do	do									S. F. Toledo	2,850,000		85	1885	
do	do									2d Mortgage	2,465,000		73	1877	
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8			
do	do									2d	200,000	7			
Milwaukee and Horicon.....	Wis.		42	1,101,200						1st Mortgage.....	420,000	8			
do	do									2d	600,000	8			
Milwaukee and Prairie du Chien.....	Wis.		27½	4,944,000	2,556,000		583,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7		1891	
Milwaukee and Western.....	Wis.		71	No report											
Mississippi and Missouri.....	Iowa,		55	No report						1st Mortgage Conv.	1,000,000	7			
do	do									2d " S. F.	400,000	8			
do	do									Oskaloosa Div.	1,425,000	7			
do	do									Land Grant.....	7,000,000	7			
New Jersey.....	N. J.		33	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000				
New Jersey Central.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860	1st Mortgage.....	3,000,000	106			
New York and Erie Pref.....	N. Y.		61½	Sold under mortgage			5,590,916	1,979,402	Sept. 30, 1860	2d "	4,000,000		96		
do	do common,		37½							3d "	6,000,000		86½		
do	do									4th "	4,900,000		76		
do	do									5th "	1,792,500		101	1873	
New York and Harlem Pref	Conn.		31½	5,717,190	6,055,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7		1864	
do	do common		13							2d	1,000,000	7		Dec. 1, 1860	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	6		Oct. 1, 1860	
do	do									"	972,000	7		May 1, 1863	
New York Central.....	N. Y.		83½	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,925,000	6	98	1883	
do	do									Mortgage.....	3,000,000	7	104½	June 15, 1864	
Northern Central.....	Md.		138	2,260,000	5,890,300	537,936	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,080,500	6		1885	
North Missouri.....	Mo.			2,433,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6			
Ohio and Mississippi, Eastern Div....	Ohio & Ind		192	Leased.	9,880,000	2,320,030	892,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500				
do	do									3d "	316,995				
do	do									Construction.....	4,637,920				
do	do									Income.....	3,591,183				
Ohio and Mississippi, Western Div....	Ills.		148		3,202,403		No report			State Loan.....	7,000,000	6	38		
Pacific.....	Mo.			3,199,662	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	" S. W.	2,000,000	6			
do	do									Construction.....	4,500,000	6			
Pennsylvania.....	Pa.		359	13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,900,000	6		1888	
do	do									2d	2,319,000	6		1875	
do	do									2d " Sterling.	1,957,410	6		1875	
do	do									State Works.....	7,200,000	5			
Penn and Indianapolis.....	Ind.		74	1,100,090	820,000	80,000	No report			1st Mortgage	2,300,000	6		1894	
Philadelphia, Wil. and Baltimore.....	Del.		98	6,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863	
do	do									1st Mort. O. & P. .	1,000,000	7		1865	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	2d "	750,000	7		1866	
do	do									1st " O. & I.	1,000,000	7		1872	
do	do									2d "	380,000	7		1873	
Pittsburgh and Connellsville.....	Pa.		49	1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000				
Racine and Mississippi.....	Wis.		164	2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.						
do	do														
Sandusky, Dayton and Cincinnati. .	Ohio.		170	2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856	
do	do									"	997,000	7		1866	
do	do									"	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.		125	848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886	
Savato and Hocking Valley.....	Ohio.		56	40,975	500,000	100,000	110,200	53,100							
Springfield, Mt. Vernon & Pittsburgh..	Ohio.		50	1,000,000	1,050,000	200,000				1st Mortgage.....	500,000				
do	do									2d	450,000				
Steuensville and Indiana..	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do	do									2d	900,000	7		1865	
Terre Haute, Alton and St. Lous.....	Ills.		508	No report						1st Mortgage Conv.	1,000,000	7	75	1862	
do	do									2d " Conv.	2,000,000	7		1868 & 1870	
do	do									1st " Bel. & Ill.	517,000	7		1873	
Terre Haute and Richmond.....	Ind.		100	1,381,450	270,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	270,000	7	75½	1866	
Toledo, Wabash and Western.....	Ohio & Ind		51½	2,123,300	5,996,049	52,389	233,545			1st Mortgage.....	3,400,000	7		Aug. 1, 1865	
do	do									2d	2,500,000	7	45	Nov. 1, 1876	
do	do									Mort. Coupons.....	96,049	7		1860 to 1865	

STEEL RAILS FOR RAILROADS.

Extract of a paper read "On the manufacture of steel rails and armor plates, by Mr. John Brown, of Sheffield, England, before the British Institution of Mechanical Engineers. Copied from *Newton's London Journal of Art* for February, 1862:

STEEL RAILS—One of the most important items in the cost of railway maintenance is the renewal of rails, and it is therefore natural that much attention should have been paid to the various methods proposed for giving greater durability to the rail. Experience has shown the want of some means by which their durability can be prolonged; and in the manufacture of rails it is now always expected that the quality of the material and the method of piling shall be distinctly stated before any large amount of work is undertaken.

No ordinary material or method of piling or making the finished rail will, however, resist the crushing action of modern locomotives; and extraordinary means have been sought to accomplish this much desired object. Amongst the most important of the methods hitherto used for this purpose is that of forming the wearing surface of the rail entirely of steel, by introducing a bar of steel into the pile, and rolling it out so as to unite it with the iron body of the rail. Another method is to submit the surface of the ordinary iron rail to a process of conversion in a furnace specially adapted, thereby case-hardening the outer skin of the wearing portion of the rail. Both of these processes have many advocates and to a certain extent they fulfil their object; still, they are open to the serious objection that only the crust or skin of the rail is rendered hard, and they do not prevent the body of the rail from yielding to the severe pressure of the wheels; lamination and splitting are only to a small extent diminished, and though the life of the rail is prolonged, the prolongation is uncertain. The same objections apply to the puddled steel rail, and it is also liable to vary considerably in its hardness and to be at times too brittle for perfect safety. This liability to vary in quality is inseparable from the mode of manufacture as at present practiced; and though many very good rails of this kind have been produced, the want of certainty in the manufacturing process seriously diminishes its value.

The introduction, however, of Bessemer's system has opened out a mode of producing a pure homogeneous hard and tough material, most admirably suited for the manufacture of rails; and though their cost may for a time prevent their being extensively used, there is no doubt that on every railway there are certain places where they would be laid with economy, where the traffic is so constantly severe that ordinary points and crossings have to be renewed on an average four times a year. Once laid of cast steel rails, they would give no trouble for many years.

In the Bessemer process, the pig metal is reduced in a reverberatory furnace, and is then run by a trough into the blowing or converting vessel; in which air is forced through the fluid metal for about 20 minutes; or until the fluid pig is almost entirely decarbonized. A small quantity of melted pig, containing a known quantity of carbon, is then added, and the charge or converted metal is then transferred to a ladle, from which it is poured into ingot moulds; not however by the usual mode of canting the ladle, but by opening a valve in the bottom of the ladle, which allows only the pure metal to run into the moulds. The ingots are made of such weight and form as

are necessary for the production of each rail. Thus for a 6-yard rail of 84 lbs. per yard, the ingot requires to be 9 inches square and 26 inches long. This ingot is hammered down to 6 inches square and 5 feet long, and then rolled in the ordinary way. It will be evident, that the only limit to the length of the rail made in this simple manner is either the weight of the ingot which can be produced, or the length of the rolling mill or heating furnace. It is as easy to produce long lengths as short ones; and in this respect the above method has some advantage over piling.

There is no tendency to lamination in this perfectly homogeneous material and its toughness and ductility are remarkably shown in the specimens exhibited, all of which were twisted and bent while cold. Its tensile strength is upwards of 40 tons per square inch.

Cast steel rails are not an entire novelty; for several years ago a few were made at Ebbw Vale, and were laid at the bridge at the north end of the Derby station, and there they are at the present time perfectly sound and good, whilst the neighboring iron rails have been many times worn out and replaced. But these rails are made, at great expense, from ingots cast in the old or usual method, and the imperfect appliances then existing made it impossible to introduce them commercially. Still, the experiment at Ebbw Vale has clearly proved the far greater power of resisting wear and tear possessed by steel rails; and now the method of producing ingots by the Bessemer process enables rails to be produced which bids fair to become in truth a really "permanent way."

Mr. Brown exhibited specimens of the steel rails, fractured, to show the quality of the metal; and pieces of the rails that had been bent double while cold without fracture: also a piece of 75 lbs. double-headed rail which had been drawn down hot into a bar 1 inch square, and then twisted cold without showing any tendency to cracking or splitting. In answer to a question of the Chairman, he said that they had been used hitherto mainly on the continent: those longest laid had been down about six or seven months at the new Pimlico Railway Station in London, and had proved very satisfactory; they were in as good condition now as when first laid; and a set of steel points and crossings had also been in constant use for seven months at the same station. There were also some of the steel rails more recently laid on the Caledonian, Lancashire and Yorkshire, London and North Western, and Rhymney Railways; but these had not yet been down long enough to afford any results as to their durability. The rails showed not the least brittleness, but were much tougher than wrought iron rails. The fractured rails exhibited were purposely broken at the time of rolling, to show the quality of the metal: and its great toughness was proved by the rails exhibited, which were all bent and twisted cold. The cost of the rails was, of course, higher than that of ordinary rails, and was an objection against them on English railways; but continental companies were willing to pay the extra first cost of a more expensive rail, provided they would wear longer than ordinary rails, and he believed the steel rails would wear out at least five ordinary rails; but none of the steel rails had been used up yet, and their durability could only be estimated from their comparative appearance after a short time of wear. The price of the rails was £18, 10s, in England, and £5 or £6 more on the continent.

Col. Kennedy inquired what reduction of

weight it was considered could be safely made in the rails by the use of steel instead of the ordinary wrought iron rails.

Mr. Brown said the weight was reduced about one third as compared with the ordinary wrought iron rails. The 75 lbs. double-headed had been tested up to 80 tons in the centre, with 3 feet length within the bearings, and the deflection was $2\frac{3}{4}$ or 3 inches, without showing any signs of cracking.

Mr. J. Fenton asked how the 80 tons load was applied, whether by hydraulic pressure or by dead weights, and how it was measured; with hydraulic pressure, it was sometimes difficult to ascertain the pressure correctly, in measuring by safety valves. He inquired also whether the ends of the rails were fixed in the bearings during testing.

Mr. Brown said the load was applied by hydraulic pressure, and measured by two safety valves—the valve of the press, and a separate valve on Mr. Naylor's plan, fixed on purposely for the experiment, to prevent any risk or mistake. The rails were simply supported on the bearings in testing, with the ends left free.

MONETARY AND COMMERCIAL.

The condition of the money market is without change since our last issue. There is an abundant supply of capital for all legitimate purposes, which can be readily obtained on first class paper at low rates; but where the security offered is not satisfactory, it is difficult to negotiate loans. Exchange is firm at quotations:

	Buying.	Selling.
New York Sight.....	par	$\frac{1}{4}$ prem.
Philadelphia Sight....	par	$\frac{1}{4}$ prem.
Boston Sight.....	par	$\frac{1}{4}$ prem.
Baltimore Sight.....	par	$\frac{1}{4}$ prem.
Gold.....	$1\frac{1}{2}$ prem.	2 prem.

Business generally is looking up, and merchants wearing pleasant faces. The routes of business travel in the city are thronged with drays and merchandise.

Flour has a local market only. Superfine quoted at \$4 10, and Extra at \$4 15 to \$4 20.

Wheat is quoted at 90c. for Red and \$1 for White. Buyers offer 3 $\frac{3}{4}$ 5c. below these figures.

Corn sells freely at 32c. Oats at 29c.

Rye is firmer; sales were made at 50c, 51@ 52c.

Barley is steady at 70c. for strictly prime; the inferior grades are not sought after, and hard to sell.

Whisky is firm, and gained $\frac{1}{2}$ c.

The temper of the New York Stock market is shown by the following from the *Tribune* of Tuesday: The market is evidently at a pause, neither party being disposed to act with energy, and in a sensitive condition to the events of the immediate future. The bears were industrious in circulating unfavorable rumors; but the effect was trifling. At the Second Board the features of the morning prevailed. The quotations were steady, but the dealings were very limited. There was no change later in the day, and the business was limited. At 4 $\frac{1}{2}$ o'clock the quotations were: U. S. 6s, 1881, Reg., 93 $\frac{3}{4}$ @93 $\frac{1}{2}$; U. S. 6s, 1881, Coupons, 93 $\frac{3}{4}$ @93 $\frac{1}{2}$; Treasury Notes,

7.30, 99 $\frac{1}{2}$ @100; American Gold, 101 $\frac{1}{2}$ @102; Tennessee 6s, 54 $\frac{1}{2}$ @54 $\frac{1}{2}$; Missouri State 6s, 48 $\frac{1}{2}$ @48 $\frac{1}{2}$; Pacific Mail Steamship Company, 100 $\frac{1}{2}$ @101; New York Central Railroad, 82 $\frac{1}{2}$ @82 $\frac{1}{2}$; Erie Railway, 36 $\frac{1}{2}$ @36 $\frac{1}{2}$; Erie Railway, Preferred, 60 $\frac{1}{2}$ @60 $\frac{1}{2}$; Hudson River Railroad, 36@36 $\frac{1}{2}$; Harlem Railroad, 12@—; Milwaukee and Prairie du Chien Railroad, 26@28; Harlem Railroad Preferred, 30; Reading Railroad, 42 $\frac{1}{2}$; Michigan Central Railroad, 54 $\frac{1}{2}$ @54 $\frac{1}{2}$; Michigan Southern and Northern Indiana Railroad, 22 $\frac{1}{2}$; Michigan Southern and Northern Indiana Railroad, Guaranteed, 46; Panama Railroad, 121@122; Illinois Central Railroad, 60 $\frac{1}{2}$ @60 $\frac{1}{2}$; Galena and Chicago Railroad, 67@67 $\frac{1}{2}$; Cleveland and Toledo Railroad, 45 $\frac{1}{2}$ @45 $\frac{1}{2}$; Chicago and Rock Island Railroad, 54 $\frac{1}{2}$ @54 $\frac{1}{2}$; Cleveland and Pittsburgh Railroad, 17 $\frac{1}{2}$ @17 $\frac{1}{2}$; Chicago, Burlington and Quincy Railroad, 62@62 $\frac{1}{2}$.

The following is a synopsis of the present National Debt, compiled from the last official statements published at Washington. It gives the date and character of the various issues of Government securities, and in this respect it will be found highly valuable, not only to those who wish to invest, but as a matter of general information and national interest.

On Dec. 1, 1861, the public debt (according to statement on page 41 of the Report of the Finances) consisted as follows:

Funded debt—5 and 6 per cent. Bonds....	\$120,324,948 50
Three Years' Bonds—7 3-10 int.—2 issues	100,000,000 00
Treasury Notes.....	24,464,761 64

Aggregate of above.....	\$242,789,710 14
Demand Notes, then issued.....	24,50,325 00

Total Debt, Dec. 1, 1861..... \$267,240,035 14

The issues of Demand Notes were afterward increased, so that the whole amount now out, or recently outstanding, of the first issue is reported to be \$60,000,000.

THE FUNDED DEBT.

Texas Debt Bonds, 5 per cent.—past due....	112,092 59
U. S. 5s of 1865—Texas Indemnity.....	3,451,000 00
U. S. 5s of 1861—Loan of 1860.....	7,022,000 00
U. S. 5s of 1864—Loan of 1859.....	20,000,000 00
U. S. Oregon War Debt, 6s—due 1881.....	307,900 00
U. S. 6s of 1862—Loan of 1862.....	3,483,254 11
U. S. 6s of 1867—Loan of 1867.....	9,415,250 00
U. S. 6s of 1868—Loan of 1868.....	8,902,341 00
U. S. 6s of 1861—Loan of 1861.....	18,415,000 00
U. S. 6s of 1861—Twenty-Year 6s, issued to the Banks.....	60,000,000 00

Total of the Funded Debt..... \$120,324,948 50

On each class of the above stocks the interest is payable in January and July. The rate of interest on each is indicated by its popular name.

The issues of 6 per cents of 1881 are under the acts of Feb. 8 and July 17, 1861. The amount of this stock that has been issued, according to the above table, is \$68,415,000. This is the stock into which the 7 3-10 Treasury Notes can be funded. The Government has not reserved any privilege to pay it off before 1881; hence it is a positive twenty-year stock.

7 3-10 NOTES—THREE YEAR BONDS.

The Treasury has made two issues of 7 3-10 per cent. notes, each due three years from date. All of these have coupons for semi-annual interest appended on the right end.

Each issue is for \$50,000,000, making \$100,000,000 now out. The first issue was made on the 19th of August, 1861, and these are called "19th of August notes." The second issue was made on the 1st of October, 1861, and these are called "October notes." The first interest coupon on the August notes came due on the 19th of February, and was paid. The first interest coupon on the October notes falls due on the 1st of April.

These notes or bonds are exempt from taxation; the interest is payable in gold, and the holder has the option of claiming payment when they mature, or of funding them into a twenty-year six per cent. stock at any time before they fall due.

TREASURY NOTES.

Old Treasury Notes, issued prior to 1857—5 and 6 per cent.—past due.....	\$105,111 64
Recent do., Act of Dec. 23, '57—various rates of interest—mostly past due.....	664,200 00
One Year do., Act of Dec. 17, '60—6 per ct., due one year from date.....	9,933 950 00
2 Year do., Acts of June 23, '60, and March, '61—6 per ct.—do. July and Aug. '63..	7,767,600 00
Sixty Day do., Acts of March 25, July 17, and Aug. 5, '61—6 per ct.—past due.....	3,992,900 00

Aggregate of above Notes.....	\$32,464,761 64
Demand Notes—first issue.....	\$60,000,000 00

Total Treasury Notes outstanding \$82,564,761 64

All of the Treasury Notes, now issued, and included in the list above given as outstanding, are receivable at the Custom-House for duties upon imports, and all other public dues.

THE DEMAND NOTES—WITHOUT INTEREST.

The first issued United States Demand Notes, without interest (notes of \$5, \$10, and \$20,) amount to \$60,000,000. The new (forthcoming) United States Demand Notes are authorized to the amount of \$150,000,000. Under recent legislation, the first issue as well as the second is "legal tender," and both are receivable at the Custom-House for duties upon imports.

THE NEW ISSUES AUTHORIZED.

The additional issues recently authorized by Congress are as follows:

1. Demand Legal Tender Notes, \$150,000,000.
2. Certificates of Indebtedness (to be issued to contractors and other public creditors, under Act of March 1, 1862,) payable one year from date, or sooner, at the option of the Government, bearing 6 per cent. interest, payable at time of redemption, \$100,000,000.
3. Sub-Treasury Certificates of Deposit (on temporary deposits,) payable after 10 days' notice, with interest of 5 per cent. (not exceeding 5 per cent.) payable on redemption—the whole amount of such deposits not to exceed \$50,000,000.
4. Loan of 1862—not to exceed \$500,000,000.

The Treasury Note and Loan Act, approved February 25, 1862, authorizes \$500,000,000 of 6 per cent. bonds, coupon or registered, having 20 years to run, but redeemable at the pleasure of the Government, after 5 years. The stock is the only stock into which the Govern-

ment will fund the "legal tender" currency. It will not probably be in the market before July.

—The St. Louis, Alton and Chicago Railroad earned for the week ending April 7:

	1862.	1861.
Passengers.....	\$6,257 86	\$5,114 00
Freight.....	2,736 52	8,453 20
Sundries.....	815 33	815 34
Total.....	\$15,809 71	\$14,412 54
Increase in 1862.....	1,307 17	
Total this month to date.....	15,819 71	14,412 54

The corrected weekly statement of earnings from Jan. 1 to March 31, 1862, is:

	1862.	1861.
Passengers.....	\$74,913 14	\$73,405 24
Freight.....	108,511 94	151,617 83
Sundries.....	10,103 78	10,450 14
Total.....	\$193,528 86	\$235,513 21
Military service.....	74,584 52	
Total to date.....	\$268,113 38	\$235,513 21
Increase in 1862.....	32,684 17	

—The earnings of the Toledo and Wabash Railroad for the first week of April were:

	1861.	1862.
Passengers.....	\$4,525 35	\$3,991 94
Freight.....	12,841 29	13,537 49
Total.....	\$17,366 64	\$17,429 43

—The March earnings of the Norwich and Worcester Road show a respectable gain. The figures are:

	1861.	1862.
Passengers.....	\$7,459 57	\$9,124 91
Freight.....	13,904 99	15,125 33
Total.....	\$21,454 56	\$24,250 24
Increase.....		\$2,795 68

The increase is entirely in the through business, induced mainly by the superior character of the boats connected with this line.

—The Michigan Central earned the first week in

April, 1861.....	\$36,718 02
April, 1862.....	32,993 00
Decrease.....	\$4,724 93

—The Michigan Southern earnings in March show an excess over 1861, and April thus far shows a favorable result. From the Rock Island and Galena Roads the reports of the local managers are encouraging.

—The traffic of the Great Western Railway of Canada for the week ending March 28, compared with the corresponding week of last year, was:

Total.....	\$56,447 28
Corresponding week of last year.....	30,757 55
Increase.....	\$25,689 72

—The earnings of the Chicago and North-Western Railway Company for the fiscal year ending March 31, 1862 and 1861, were:

	1862.	1861.	Increase.
Passengers.....	\$304,546 19	\$241,226 36	\$63,319 83
Freight, Mails, &c.....	54,530 86	450,933 97	59,593 89
Totals.....	\$849,077 05	\$722,163 33	\$126,913 72

—The earnings of the Buffalo, New York and Erie Railway, for the month of March, were:

March, 1862.....	\$91,144 97
March, 1861.....	49,194 43
Increase, 1862.....	\$31,950 51

—The Chicago and Rock Island Railroad shows for March:

1862.....	\$71,604
1861.....	75,275
Decrease.....	\$3,671

The fourth week gave an increase of \$2,300.

—The receipts of the Harlem Railroad for the month of March are as follows:

March, 1861.....	\$88,790 72
March, 1862.....	103,020 32
Increase.....	\$14,229 60

—The earnings of the Milwaukee and Prairie du Chien Railroad for March foot up as follows:

Passengers.....	\$18,015 99
Freight.....	24,887 85
Mails and rents.....	4,106 33

Total.....	\$47,000 27
Corresponding month, 1861.....	43,636 62
Increase.....	\$8,373 25

Earnings for first three months, 1862:

Passengers.....	\$16,334 67
Freight.....	13,056 66
Mails and rent.....	19,428 76

Total.....	\$193,820 09
Corresponding quarter, 1861.....	141,919 39
Increase.....	\$51,910 70

—The Great Western Road of Canada earned the

Week ending April 4, 1862.....	\$59,863 16
Corresponding week of last year.....	45,398 53
Increase.....	\$4,464 63

—The March earnings of the Chicago, Burlington and Quincy Railroad were:

Freight.....	\$78,849 83	1862.	\$56,336 60	Inc.	\$22,513 23
Passengers.....	24,465 40	1861.	21,751 04		2,714 36
Mails and Misc.....	3,369 67	1862.	3,971 21	661 54	

Total.....	\$106,684 90	1862.	\$82,058 85		\$24,566 05
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Between Chicago and Burlington—210 miles:

Freight.....	\$92,607 35	1862.	\$67,852 71	Inc.	\$24,654 64
Passengers.....	29,979 87	1861.	25,580 47		4,399 40
Mails and Misc.....	3,673 74	1862.	4,321 21	647 47	

Total.....	\$126,260 96	1862.	\$97,753 39		\$28,497 57
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Between Quincy and Galesburg—140 miles:

Freight.....	\$21,638 97	1862.	\$15,439 99	Inc.	\$6,598 98
Passengers.....	8,916 47	1861.	7,276 38		1,640 59
Mails and Misc.....	1,190 43	1862.	1,193 33	2 90	

Total.....	\$31,746 37	1862.	\$23,509 10		\$8,237 37
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Ag't for 310 miles	\$158,007 33	1862.	\$121,272 39		\$36,734 94
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Baltimore and Ohio Railroad

RE-OPENED!



This great national thoroughfare is again open for

Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition,

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wes. Ag't, Belleaire, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

—The following is a report of the amount of coal transported over the Delaware, Lackawanna and Western Railroad for the week ending Saturday, April 5:

	Week.	Year.
	Tons. Cwt.	Tons. Cwt.
Shipped North.....	6 205 00	60,749 00
Shipped South.....	10,116 13	169,899 01
Total.....	22,321 13	230,559 00

For corresponding time last year:

	Week.	Year.
	Tons. Cwt.	Tons. Cwt.
Shipped North.....	5,214 04	51,169 01
Shipped South.....	25,744 04	165,490 19
Total.....	20,992 08	216,659 19
Increase.....		13,899 01.

ERIE RAILWAY.

Great Broad Gauge, Double Track and Telegraph Route

TO

NEW YORK, BOSTON, AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

CHARLES MINOT, Gen'l Sup't.

N. W. BALDWIN,

MATHEW BAIRD.

M. W. BALDWIN & CO. ENGINEER'S

BROAD AND HAMILTON ST.

Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-five years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

419 y

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily for the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M.; Chicago at 6:00 A. M., connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

KNOX & SHAIN, Engineering and Telegraphic

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(Two Premiums by Franklin Institute.)

OHIO & MISSISSIPPI RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENT, NEN, Cairo, and St. Louis.

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.

RETURNING.—Mail Train Leaves East St. Louis.—(Sundays excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M. arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office No. 5 East Third street; No. 1 Burnet House corner of north-west corner of Front and Broadway; Spencer House Office; and at the Depot corner of Front and Mill Streets.

G. B. MCLELLAN, Gen'l Superintendent

Omni-buses call for Passengers, November 11th, 1861.

1861. 1861
FAST TIME.
LITTLE MIAMI
 (AND)
COLUMBUS AND XENIA
 AND
CINCINNATI, HAMILTON & DAYTON

RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad for Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Richmond, Indianapolis and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express—From Cincinnati, Hamilton and Dayton Depot—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily. Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,

General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

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W. MORRILL.

G. B. BOWERS

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Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in every case.

1862. 1862.
Pennsylvania Central R.R.
285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
 FOR SAFETY, COMFORT AND SPEED,
 TO ALL THE EASTERN CITIES!
 THE TRACK IS STONE BALLASTED
 AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH to PHILADELPHIA
 (with close connections from Western Cities,)
 ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
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BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
 ONE TRAIN RUNS DAILY (430 MILES.)
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EIGHT DAILY TRAINS FROM
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 BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.
 ON NIGHT TRAINS TO
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BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

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Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "PA. PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburgh.

CLARKE & CO., Transfer Agents, Pittsburgh.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

W. W. ALKMAN & CO., Evansville, Ind.

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CLARKE & CO., Chicago, Illinois.

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L. L. HOULT, Gen'l Ticket Agent, Philadelphia.

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Chilled Railroad Car Wheel, Tyre,
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Railroad Machine Works,
Wilmington, Delaware,
 MANUFACTURE

CHILLED WHEELS

—AND—
TYRES,

FOR RAILROAD CARS

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LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS,

Either Single or Double Plate,

With or without Axles

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

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MACHINERY,

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ALBERT BRIDGES.

JOEL C. LANE

Cincinnati and Chicago Air-Line



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42 Miles Shorter than any other Route
NEW SLEEPING CARS ON ALL NIGHT TRAINS.

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For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-office and the Burnet House; No. 5 East Third Street; No. 169 Walnut Street; Sixth Street Depot.

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General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent,

Burnet House, Cincinnati, O.

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STOCK BROKER,

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FOR 1861

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OF ALL THE RAILROADS IN THE

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they could be ascertained.

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MACHINE, have introduced a new style, working upon the
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Fifty-Five Dollars.

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COAL OR WOOD BURNING
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The above works being located on the New York Central
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JOHN ELLIS, President.

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ers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, APRIL 24, 1862.

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“ “ six months.....	110 00
“ “ per annum.....	200 00
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THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrangements are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

To ADVERTISERS.—We call the attention of those who have anything to dispose of in the way of Railroad supplies to the advertising pages of the *Record*.

If Railroad officers will place us under obligations if they will forward promptly to this office the Annual Reports, Monthly Statements, and such other matters as they may deem worthy of publication.

Subscribers in Great Britain, 13s. 6d. (\$3 payable in advance)

Arrival and Departure of Trains.

	Depart.	Arrive.
Cincinnati, Hamilton & Dayton—		
Lozansport & Chicago Express.....	7.30 A. M.	9.15 P. M.
1st R. I. C. T. & Sand. Mail.....	7.30 A. M.	5.45 P. M.
Dayton & Toledo.....	7.30 A. M.	9.15 P. M.
2nd Hums. Accommodation.....	9.00 A. M.	8.10 A. M.
3rd. Richmond, Day & Bell'n Ex.....	3.30 P. M.	9.15 P. M.
4th Dayton, Tol. & Detroit Ex.....	5.30 P. M.	11.25 A. M.
Lozansport & Chicago Express.....	7.30 P. M.	8.10 P. M.
Glendale Accommodation.....	7.30 P. M.	7.00 A. M.
6th Columbus Express.....	10.00 P. M.	7.40 A. M.
Little Miami—		
Morrow Accommodation.....	7.40 A. M.	1.30 P. M.
2d Day Express.....	9.45 A. M.	6.50 P. M.
Camp Dennison Accommodation.....	3.15 A. M.	6.10 P. M.
3d. Columbus Accommodation.....	4.00 P. M.	10.37 A. M.
4th. Xenia Accommodation.....	5.50 P. M.	8.00 A. M.
Marietta & Cincinnati—		
1st Mail Express.....	8.10 A. M.	10.05 A. M.
2d Accommodation.....	3.30 P. M.	5.45 P. M.
Cincinnati, Wilmington and Zanesville—		
1st Mail Express.....	9.45 A. M.	8.00 A. M.
2d Accommodation.....	3.50 P. M.	6.45 P. M.
Ohio & Mississippi—		
1st Mail Train.....	7.00 A. M.	10.15 P. M.
2d Aurora Accommodation.....	3.5 P. M.	7.55 A. M.
3d Express Train.....	7.20 P. M.	8.28 A. M.
Indianapolis & Cincinnati—		
1st Mail.....	5.50 A. M.	9.45 A. M.
2d Accommodation.....	2.45 P. M.	5.10 P. M.
3d Chicago Express.....	5.00 P. M.	12.20 A. M.
Kentucky Central—		
1st Express.....	6.38 A. M.	10.44 A. M.
2d Accommodation.....	2.24 P. M.	7.10 P. M.
Cincinnati & Chicago Air Line—		
Mail.....	7.30 A. M.	9.15 A. M.

BALTIMORE & OHIO RAILROAD.

At the February meeting of the Board of Directors of this Company a preamble and resolutions were offered alluding to rumors of suspected disloyalty on the part of some of the officers and employees of the road, and expressing the belief that suspicions of this character were the reasons why Government had so long delayed extending its aid in reopening the line, and requiring all the officers and employees of the company immediately to take the oath of allegiance to the Government. These resolutions were offered by a newly-elected member of the Board, and were laid upon the table for the reason that the Board regarded the statement of facts in the preamble as untrue, and that they were unwilling to admit, by a formal resolution, even an implication against their patriotism and devotion to the Union. They therefore laid the resolutions upon the table for investigation into the facts alleged. At the next subsequent meeting of the Board, the following resolution was adopted:

Resolved, That the display of the American flag, as heretofore, at prominent stations of the Company, is hereby approved; and that, as the Company regains possession of its road, the National flag shall be displayed at its principal stations, and shall so continue until otherwise ordered by the Board.

Since the opening of the road, the resolutions above referred to have been republished, extensively accompanied by remarks prejudicial to the company. President Garrett, in reply to these says:

"The immense and important services of this company have been rendered to the Government with such uniform fidelity, energy and success, as to have fully commanded its confidence and respect. In the midst of all the protracted difficulties upon the line, upwards of 650,000 soldiers have been transported upon the road and its branches, without killing or wounding a single man confided to the care of the company.

"The attacks to which you refer evidently arise from rival roads, who are irritated and excited by the *great reduction of twenty two cents per hundred pounds on all freight from Cincinnati, etc., to Baltimore and other eastern cities, ordered by this company on its reopening, compelling similar reduction upon those lines.* With the appreciation by the Government of the management of our road we believe that *the jealous and petty hostilities of rival lines can not mislead the business interests of the West.*"

It is also stated that whenever the Government has thought best to require the oath of allegiance from either officers or employees of the road, it has been unhesitatingly taken. At the March meeting of the Board, the following resolutions were adopted:

WHEREAS, Publications have been made in some of the journals of the Northern and Western States, and statements prejudicial to

the interests of this road have been industriously circulated, alleging disloyalty on the part of the officers and employees of this company, and assigning this as the reason why the Government of the United States have not at an earlier period assisted the company in opening the road to its Western termini; *And whereas*, the officers of this company have the entire confidence of the Government, as is well known to this Board, and that the delay by the Government in furnishing the necessary assistance to enable the company to open its road has not been owing to the causes alleged; *And whereas*, this Board in accordance with its own views, are opposed to the employment of any person by the company who are known to be disloyal to the Government of the United States. Therefore,

Resolved, That the employment in any capacity whatever of any person or persons known to be disloyal to the Government of the United States will meet with the unqualified disapprobation of this Board, and if any persons now in the employ of this company shall be discovered to be disloyal to the Government, the removal of such person is imperatively demanded; and the President and Heads of Departments are hereby requested to discharge all such persons from further service.

Resolved, That no person shall be appointed to any position or employed in any capacity by the officers of this company, except loyal citizens of the United States.

It will thus be seen that the company are determined to settle at once the question of their fidelity to the Government, and to keep in their employ none but loyal citizens.

This road has suffered more at the hands of the rebels against the Government than any other thoroughfare, if we except perhaps the Louisville & Nashville railroad. In view of this fact, it would seem passing strange if any one interested in its fortunes could sympathize with those who wilfully and wantonly destroyed its property, and whose rule, if successful, would forever destroy the enterprise. For this road more than any one depends upon the entirety of the Union and the re establishment of peace.

STEAMSHIP LINE FROM SAN FRANCISCO TO SHANGHAI.

In January, a bill was reported to the Senate of the United States, to establish a line of steamships from the port of San Francisco, California, to Shanghai, in China. The bill has not yet been acted upon. Senator Latham, of California, recently called up this bill, and in a speech of some length, advocated the necessity of its passage, or rather, of the passage of a substitute which he offered for the original bill. The following is the substitute:

"That the Postmaster General be, and hereby is, authorized and directed to enter into a contract, for a term not exceeding five years, for a sum not exceeding five hundred thousand dollars per annum, with such person or persons, being the lowest bidders, offering sufficient and satisfactory security, after due public notice, for the transportation of the United States mails, upon the best terms for the United States, monthly, and in thirty-five

days, from San Francisco, California, via the Sandwich islands and Japan, in case any port of that empire shall be open to the United States, to Shanghai, in China, and back, in steam vessels of not less than two thousand tons burden, of the best form of construction adapted to the navigation of the Pacific ocean; and any excess of the amount which may be contracted to be paid for this service over the aggregate of postages collected therefor shall be paid out of any money in the treasury not otherwise appropriated.

"SEC. 2. And be it further enacted, That these rail steam vessels shall be appropriately armed and equipped as war steamers, in such manner as the Secretary of the Navy may direct; they shall each be commanded by a lieutenant of the United States navy, and while employed in carrying the mails as herein provided, they shall be required to protect commerce in their route between Shanghai and San Francisco, in the same manner as if the said vessels were wholly devoted to that service."

In the course of his remarks, Mr. Latham explained the necessities of this bill to our trade with China, for the Atlantic as well as for the Pacific coast. He stated that at present all purchases by Americans in China and the East generally have to be made on London credits at great cost and delay of exchange, and putting our whole Eastern trade under the control of the foreign capitalist. With this line of steamers, our trade would be rendered independent of British steamers, and the great silver product of the California mines would become the medium for the adjustment of balances, and the city of New York further promoted in its destiny of becoming the center of exchanges for the finance and commerce of the world.

Mr. Latham said our exports to China have doubled within the last year, and there is no reason why we should not import from China, not for our own consumption, but also for other American, if not European, markets. We enjoy, really, a greater popularity in the East than any European nation. Our friendly intercourse with the people of that remote quarter of the world has never been interrupted by diplomatic difficulties or an appeal to arms, and above all, we do not excite their jealousies by the possession of powerful colonies on their own continent or the neighboring islands. Our diplomatic relations with China and Japan have, with scarcely an exception, been of the most satisfactory character, and we may, without fear of contradiction, assert that we are in favor with both the Government and people. We are indeed more favorably known than any other nation, and have none of those prejudices to overcome which arise either from distrust or a sense of injury which they have not the power to resent or punish. The road, then, is open to us, the people are willing to trade with us, and we possess the products which they most need,

and for which those countries furnish the best markets.

The State which I partly represent, and the Territory of Nevada, possess the basis of the most extensive bullion trade in the world; and yet, what is the course of the precious metals sent from California to New York? The greatest part of it is immediately shipped to England, to be either drawn against by our American merchants in China, or to be further shipped on British account to India and China to aid in settling the commercial balances of all Europe with the merchants of the Celestial Empire.

Now why should we be any longer deprived of the facility of shipping our precious metals, including the products of the most extensive quicksilver mines in the world, direct to Japan and China, saving thereby time, commission, and interest to our China merchants, and earning freights on the shipments of our own products to our navigators? In other words, why should we not render our merchants independent and high above foreign bankers, foreign mail steamers, and the good-will of foreign Governments?

Our trade with China, as it is now managed, may at any time be entirely cut off, should our diplomatic relations with England suffer a serious interruption, and would be greatly impeded were England to be engaged in war with any other maritime nation.

By the present system of exchange it costs the New York merchant about 16 per cent. to make his remittances to his correspondent in China, while by the proposed route of steamers the cost of exchange would be reduced at least one-third. The following are the exports of silver from Southampton, England, to India, China and the Straits, during the past six years:

Year.	India.	China.	Straits.	Total.
1856.....	£8,381,305	£3,166,514	£565,972	£12,113,991
1857.....	11,378,017	4,479,315	874,583	16,731,915
1858.....	3,295,935	1,355,117	101,981	4,753,033
1859.....	11,163,334	3,334,250	290,487	14,788,071
1860.....	4,385,966	3,657,443	435,330	8,478,739
1861, to				
July 25, ..	4,159,684	574,358	83,016	4,817,058

The shipments from San Francisco to China in the year 1860 were as follows:

Gold bars, valued at, ...	\$1,803,523
Silver bars, valued at, ...	135,260
Mexican dollars, ...	1,424,169
Mexican ounces, (gold), ...	8,000

Total, ...	\$2,360,952
Shipped to Japan, ...	94,200

Grand total, ...

Mr. Latham argues that the opening of the ports of Japan has given a new impetus to the trade of California and in support of his views presents the following statistics:

The whole number of tons of shipping which arrived at San Francisco, in the year 1859, was 59,831, of which 47,519 cleared for China, and 18,378 for other ports in the East Indies.

The arrivals from China were 27,814 tons; and from the East Indies 10,780 tons.

The value of cargoes was \$2,662,241, and the freights thereon exceeded \$400,000.

The imports of treasure into San Francisco

for 1859 amounted to \$2,516,152, and the exports to \$47,640,462 (including precious metals), of which \$3,100,755 was sent to China in forty-five vessels. The amount shipped to China in 1860 was \$3,374,680, in thirty-two vessels.

The exports of commodities, exclusive of bullion, increased \$3,000,000, amounting in 1860 to \$6,532,439, of which \$4,918,336, or nearly five millions, were from California alone. The exports of barley increased from 15,000 sacks, in 1854, to 163,249 in 1859; while the wheat export from 4,067 sacks, in value of \$14,900, in 1854, had, in 1860, attained the valuation of \$1,854,259. The exports of wool had, in like manner, increased from \$14,000, in 1854, to \$392,502 in 1860, showing an increase in material wealth under disadvantage of imperfect communication with the other States, and greater distance from the Government, unprecedented in the history of any other State in the Union.

Mr. Latham adds, What we now ask is to be connected by steam with that country whose population alone exceeds one-third the whole number of inhabitants of the entire globe, and to be afforded thereby that security, which, from the nature of our geographical position, we stand more in need of than any other portion of our fellow citizens in the Atlantic States or in the great valley of the Mississippi.

Mr. Latham gives the following estimate of the cost of establishing and running this line:

Four steamers (propellers), at a cost of \$300,000 each, would be required, to make trips in thirty-five days from one terminus to the other, and the first year's cost of building and supplying coal to the line would be \$1,525,000, including \$265,000 for coal in foreign ports. The expenses of running for that period would be \$720,000, and including insurance and interest on capital, and repairs and depreciation, \$1,152,000. It was estimated by the best business men in the country that the freights and passengers would, for the year, yield \$333,000—leaving thus a deficiency of about \$819,000, to be supplied by the carrying of United States mails and subsequent increase of commerce.

In the conclusion of his argument, Mr. Latham says:

We shall by this establishment add an active force to our national Navy; we shall appear as a maritime Power in the Pacific ocean; we shall render our merchants commercially independent of Great Britain, and we shall create new avenues of wealth for the mercantile genius of our people. There can be no stronger inducements to legislation than these; no nobler task for legislators than by their acts to promote the enterprise, wealth, security, and power of their country!

The benefits of this bill will inure not merely to California, but increase our national reputation and standing, and elevate us as a people. I urge the passage of this bill in the name of civilization and progress, and with a

view to our independence as a great commercial Power; I urge it on the score of our national honor, which is constantly exposed to insults from foreign nations while our Pacific coast is unprotected by an adequate steam navy; and I ask it in the name of religion, the seeds of which, if the provisions of this bill are honestly carried out, will be planted through this medium in distant climes, destined to be redeemed from the darkness of superstition.

The arguments presented by Mr. Latham—the protection of our commerce in the Pacific, the extension of our intercourse with Asiatic nations, and the facilitating of our exchanges in this important trade, are undoubtedly matters of great weight and importance. Add to these the very grave consideration of the influence of this line of steamers in advancing the interests of our Pacific Railroad, which we deem a matter of plain and manifest destiny, and it will be readily seen, that in ordinary times and under ordinary circumstances, this subject would commend itself to the serious and favorable consideration of Congress. How far the Honorable members will feel that they are able to give it countenance during the present troublous times, we shall see when the matter has been more thoroughly discussed.

EXPERIENCE IN A SLEEPING CAR.

We publish the following amusing experience of OCCASIONAL in the sleeping cars between Philadelphia and Washington. From our own experience on the same route, we are led to believe every word of it true as Gospel. Many of the ludicrous events are not confined to this route, but may be seen on any other. The genuine wit contained in the recital will, we trust, be sufficient excuse to our readers for displacing a few columns of figures to make room for it. We will let OCCASIONAL tell his own story:

Have you ever taken a sleeping car for a long ride, on any of our Western or Eastern railroads? It is a very curious experience. To the old traveler such a journey is full of incidents. Accustomed to the trip between Philadelphia and Washington, I never make it without gathering material for amusement and reflection. The best course is to secure a *full lower berth*, about thirty minutes before the rush begins, and from your roost you can, unobserved, hear much and see many odd sights. The conductor is a constantly perplexed personage. He is questioned, scolded, and importuned by turns. He must explain, apologise, and expostulate. In this *melee* it is marvelous how he preserves his temper. "Mr. Conductor," says a breathless passenger who has just got in by the New York line, "give me a sleeping place?" "Have you a ticket, sir?" "Yes, I have my through ticket." "Sorry, sir, but you must have a sleeping ticket. You can get it at the office in the station-house; but must hurry up, or you will lose your chance." And away goes the passenger, with about ten chances to one of being too late. "I have taken places for two," says a soft-spoken, handsome young fellow, with a blushing woman on his arm. "Yes,

sir," says the polite master of ceremonies, "the lady can sleep below, and you in the upper berth." "But she is my wife—and can not sleep alone or with anybody but me." "Sorry, my dear sir, but our rules are absolute—I can put another lady with her." "But she is my wife, I tell you," indignantly responds the gentleman. "I do not doubt you, sir, but I do not know it, and to avoid trouble, we have made an absolute rule to keep the ladies and gentlemen separate." And there is no remedy but to submit, or to throw up their tickets, and take another car. Frequently a family enters—mother, father, nurse, baby. The same struggle ensues on the temporary divorce of husband and wife; but the dispute is more readily reconciled, and the parties pile in. After a while, the matron gently asks, "Are you comfortable, Augustus, dear?" "Perfectly," is the smothered reply from an upper tier. "Do cover up your throat, dearest; you know you are not well—are your feet warm?" "All right," gasps the husband, like a man on the top of a hay-loft. "Jane, what is the matter with baby? Can't you keep him quiet? Bless me, he is choking. Hand him over to me," and I hear a squalling package passed over to the kind mother, who soon soothes it to rest. Enters a fat man, weighing about three hundred Avoirdupois. "Conductor, where is my berth?" "You have but one ticket, and you will please get in alongside of this gentleman"—who happens to be a delicate dandy, immediately above me, on the second shelf, and who rains down upon me a perfect shower of mingled perfume. The heavy passenger gets up and in, after a struggle, in which I participated to the extent of seeing a huge pair of legs, like twin anacondas, hanging before me, and hearing a series of angry growls and grunts; and when the mass settles on the slender wicker-bed, it shakes the whole vicinity, and leaves me in doubt whether it can hang suspended, or will fall and crush me. "God bless me, sir," says the exquisite, "but you are a very large man—you have pinned me to the wall—I shall suffocate." "Can't help it, sir; I paid for my ticket, and intend to get my money's worth." Imagine the fat one's sleep, and snore, and sweat, and the miseries of the nice young gentleman. Some of the inexperienced travelers unboot and uncoat themselves, which is always a mistake. "Bundle in as you are" is the true theory of a sleeping car. At last we are disposed of. The whistle sounds; the engine shrieks; the bell tolls; and the great train plunges into the outer darkness. A voice opposite. "Heavens, how hot it is. Conductor, there is no air. Open the door." "I object," shouts a consumptive Congressman; "I am not well, and don't mean to contract another cold." Another voice: "Charley, pass me the flask;" and then I hear a gurgling sound, and presently perceive an aroma of Cognac, which excites two persons of various opinions a little in the advance. "Stranger," says the first, "pass me your flask, and I will return the compliment when we reach Willards;" which I can hear being very promptly done. "What a disgrace it is," says the protesting temperance man, "that this place should be turned into a doggery." "By Jove!" cries out the owner of the flask, "here is Gough, the great lecturer—have a smile, my eloquent friend?" at which there is a general laugh, and the consequent subsidence of the heroic opponent of Bacchus.

Before the sleepers finally adjust their hard pillows, gather up their scanty covering, and ascertain whether their bed-fellows, if they have any, are friends or foes, some rich soliloquies and dialogues take place among those

who have not accustomed themselves to this method of transportation. "I say, conductor," exclaims a victim who is buried up in an enormous military cloak, and bound and riveted together with brass buttons, bands, and lace, "I say, this is worse than sleeping on the cold ground." "Neighbor," gasps a politician, evidently on his way for an office; "suppose we should run off the track, how could we get out?" At this moment I hear a dulcet tone in the sacred and secret end of the car: "Conductor, do draw the curtain, while I descend from my berth to take the air." Our treasure, the baby, now begins to make a loud appeal to its sleeping fountain. "Good Heavens!" ejaculates evidently a bachelor, "there is that child again. Why don't people keep their children at home when they go traveling?" "So I would say," responds a quiet wag in the corner, with a rich voice, indicating a man ready to marry, "but then I want their mammas to travel, too; you know, Crabstick, that we generally like to have our friends with us on a journey, especially when one can't get rid of them." At which another chorus of laughter. What an odd sight, to go out of your nest and pass along this catacomb of men, (for sleep is the counterfeit of death), and to watch their faces as you pass. Some look like dead men; others struggle with the heated atmosphere of the place, and others are wide awake. At last we arrive at the Susquehanna river. We quietly pass upon the top of the great boat that keeps up the line, and then some nervous fellow cries out: "Suppose we slide off, conductor, and get into this infernal water?" At which almost the whole company wakes up. The idea of dropping off into the deep excites various emotions. The fat man arouses from his apoplectic labors, and his dainty bed-fellow crawls out, resolved to stand so greasy a contact no longer. The ladies gaze upon the water, and others are surprised that the superincumbent weight does not sink the boat. We get over, however, and rush on to Baltimore, where we arrive in season. Here we receive the news of the last five hours, shouted from a mob of boys. "What a newspaper country," says an Englishman, who parts his curtain and buys a *Sun*; "they go to sleep on one battle, and wake up upon another." "Damn it," says the soldier, "there has been a fight, and I have lost my chance." "Why the devil don't they move faster?" says a hungry voice in a lower cell. "This rebellion must be crushed at all hazards," responds a *vis-avis*. "But why the hell don't you give McClellan a chance?" shouts a deep voice in a curtained cave beyond. "He has had a hundred chances." insists one of the freshly-aroused slumberers, "and I hope his next will be a victory." Now we move on to Washington. Heaven knows where we should be if this din of politics was kept up. [Don't misunderstand me, gentle reader, I *do* sleep in a sleeping car, and what I reveal now is only a *resume* of what I have seen.] At last we reach Washington. I get out among the first, for I have no boots to pull on—no coat to seek—no purse to rescue that was lost in sleep—no *monomode* hat (for most hats are alike) to recover from a mob of fighters. The fast men emerge violently; the fat man, steamy and half-alive, followed by the exquisite scowling; the politician looking for the back that can carry him to the White House; and the ladies, last not least; baby conquered and asleep; Augustus indignant and silent as if he did not know his wife, and the latter, dear Mary, resolved to hang on to him whether he rued it or no. I go home contented and wide awake.

OCCASIONAL.

PITTSBURGH, FT. WAYNE & CHICAGO R. R.

Certificates of stock in the new Company of the Pittsburgh, Fort Wayne, and Chicago Railroad will be issued on and after the 10th April, on their complying with the following provision of the agreement for the reorganization of said Company, to wit: Holders of stock of the Pittsburgh, Fort Wayne, and Chicago Railroad Company, upon the assignment of such stock to such persons as may be designated for that purpose by the purchasing agents, may be allowed to receive an equivalent amount of stock in the new Corporation, in shares of \$100 each, with scrip certificates for less amounts, not entitling the holders to dividends. The assignment books will be opened on the 10th proximo.

VALUE OF SERVICES.—The following decision, rendered in the court of Common Pleas, New York, at its April term, although not immediately bearing upon railroad affairs, is inserted because of its similarity to cases that are very likely to spring up in railroad management hereafter.

Court of Common Pleas, New York. April 10, 1862. Judge Hilton presiding.

Joseph Hoxie vs. Daniel B. Allen.

This was an action brought by plaintiff, in the year 1853, to recover \$5,000 for work and services of great value rendered, in and about the procuring the release and discharge from condemnation and forfeiture to the United States of three steamships theretofore condemned and forfeited to the United States, and wholly lost to their owner or owners, in consequence of violation of the Passenger act, in having more berths than the law allowed, and procuring the restoration of said steamships to their owner or owners, by going to Washington and making application to President Fillmore for the release of these vessels.

In October, 1852, Mr. Hoxie, having been so employed by Mr. Allen, went on to Washington, laid certain papers before the President, and after several interviews with Mr. Fillmore and paying two visits to Washington, the vessels were released.

A good deal of testimony was offered, but the question submitted to the jury was, "What was the value of the services thus rendered?"

Mr. Allen, the defendant, testified, thought \$500 and expenses sufficient. Mr. Vanderbilt contradicted a statement made by Mr. Hoxie, that, when he was asked "to lay" the papers in question before the President, that he (Mr. V.) had said that Mr. Allen would pay Mr. Hoxie for his services. Ex-Congressman Briggs thought that \$300, \$400 or \$500 was sufficient compensation; but Mr. Collins (the celebrated ship owner) considered that from 2½ to 5 per cent on the value of the property restored to the owners would be but fair compensation for such services.

The value of the three vessels, it appeared, amounted to \$300,000.

After an elaborate charge from his Honor, who left the question as to the value of the services rendered by plaintiff to the jury, a verdict was rendered for \$400.

For Plaintiff, James T. Brady, Esq., and Messrs. Hoxie and Stevens; for defendant, Mr. Ellingwood.

PENNSYLVANIA RAILROAD.

The fifteenth annual report of the Pennsylvania Railroad is received. We have already published the report of the President giving the general statement of the company. As this is one of our best managed railroads a statement of some of the details of its operation can not be otherwise than interesting to our readers. The Superintendent in his report says.

During the year we have just passed through,—owing to the condition of the country,—to the closing of the Mississippi river, and of other outlets for the trade of the West, and to the great demands made for transportation on Government account, full occupation has been given to the East and West lines of railway, and the Pennsylvania Railroad has shared largely in this increased business. Since April, its equipment has been fully employed, and, during the last three months, more freight has been seeking an outlet over the line than it was prepared to accommodate.

The business of the year has been large, and the results are as follow:

The Earnings have been,
From Transportation of Freight...\$5,398,025 56
First Class Passengers } 1,406,018 41
Emigrant Passengers } 74,398 62
United States Mails,.....145,158 14
" " Troops,.....75,120 00
From the Adams Express Company,
From Rent of Property, Individuals
and Corporations, Incidental Re-
ceipts, and all other sources,.....201,280 22
\$7,800,000 95

The Expenses have been,
Conducting Transportation,.....\$1,199,131 24
Motive Power,.....1,102,406 36
Maintenance of Cars,.....270,825 00
Maintenance of Way,.....1,011,677 14
General Expenses,.....69,023 02
\$3,653,062 76

Net Earnings,.....\$3,646,938 19

Showing an increase in the gross earnings, as compared with last year, of \$1,367,299 47, and an increase of the net earnings of \$1,350,535 79.

During the past year, there have been transported 1,059,088 First Class Passengers, and 11,867 Emigrant Passengers, and there have been moved 1,620,586 tons of Freight, being a decrease of 132,525 First Class Passengers, and an increase of 273,061 tons of Freight, as compared with 1860.

The Expenses for the year 1861 compare with those of the previous year as follow:

	1860.	1861.
Motive Power,.....	\$ 970,490 32	\$1,102,406 36
Condt. Trans'n,.....	1,539,361 08	1,199,131 24
General Expenses,.....	32,831 46	69,023 02
Maint. of Way,.....	783,163 81	1,011,677 14
Maint. of Cars,.....	260,452 41	270,825 00
Total Increase,.....		\$370,801 96
" Decrease,.....		354,038 28

Net Increase of Expenses over '60, \$16,763 68

So that the business of the year shows an increase over 1860 of \$1,350,535 79 in the re-

ceipts, with an increase in the expenses of only \$16,763 68.

Motive Power Expenses have largely increased with the large increase of business, 779,594 more miles having been run with Engines, and 273,061 more tons of freight having been moved in 1861 than in 1860.

Several items of increase show largely—

Thus: Coal account has increased \$36,811 04 while the cost of fuel has decreased 76 cents per 100 miles run.

Repairs of Engines account has increased 22,762 05, but the cost of repairs has decreased \$1 04 per 100 miles run.

Engineers and Firemen account has increased \$24,956 89, with the increase of 719,594 miles in the miles' run.

Individuals and Company's account, also in Motive Power, has an increase of \$28,527 95 charged against it.

The cost of 6 new Engines, which have been added to Repairs of Engines account, to make up for depreciation, is \$10,949 16 more than was added for the same purpose last year, making an aggregate increase of \$124,006 09; the remainder, being cost of stores, &c., is legitimately due to the large increase of business.

Conducting Transportation Expenses are \$349,229 84 less than last year, being largely due to the removal of the State tax upon tonnage which has not been charged on this account since March last, also to the absence of the charge of H & L R. R. tolls, that road having passed into the exclusive possession of the Company, by a lease for 999 years, and has been operated as a part of our Main Line since January 1st. 1861.

General Expenses are \$13,808 44 less than in 1860.

Maintenance of Way Expenses have increased \$228,513 33; of this increase, \$116,908 68 has been expended on the H. and L. R. R. and Branch, 55 miles in length, since January, 1861; and there has been the large increase of \$162,352 32 in Iron Rail account, part of which is chargeable to H. and L. R. R., 14,863 tons of iron having been used for renewals in 1861 being 8,370 tons, shows an increase of 6,493 tons.

This large expenditure for iron rails was necessary to the safety of the track, under the heavy traffic which has passed over it.

The cost of keeping in order the track of the Waynesburg Road, 18 miles in length, has been added to the expenses of this department, since November 1st, last.

The increase of Watchmen's account, \$28,797 18, was necessary to insure the safety of the bridges and track during the disturbed condition of the country, at a time when Government interests, as well as those of the Company, demanded that no expense should be spared that was necessary to keep the communication uninterrupted.

Maintenance of Cars. The increase in the

expenses of this department is wholly due to the increase of business of the Road, 30 more cars having been rebuilt, and 44 more new cars having been built than last year, in addition to the increased expense of keeping in running order our increased stock.

Equipment of Road. Since last Report, 6 First Class Freight Engines have been purchased to meet depreciation of Locomotives, replacing 6 old machines condemned. And additions to the equipment of the Road have been made as follow:

- 14 First Class Freight Engines.
- 2 Tank Engines for Delaware Extension.
- 2 " " (small) for Passenger trains on Branch Roads.
- 100 New 8-wheeled Stock Cars, built at Company's shops.
- 160 New 8 wheeled House Freight Cars, purchased.
- 200 New 8 wheeled Coal Cars, running in Broad Top trade.
- 200 New 8-wheeled Coal Cars, owned by the Philadelphia and Reading R. R. Co., and run jointly with those owned by the P. R. Co. in the Broad Top Coal trade.
- 350 8-wheeled Coal Cars, owned by Westmoreland and Penn Gas Coal Companies.

We have had hired, from the Philadelphia and Reading R. R. Co., on favorable terms, during a portion of October, 4 First Class Engines, and during November and December, 8 First Class Engines, which have been of material assistance in moving the increased tonnage of the road.

There have been contracted for, in addition to the foregoing, to be delivered early in 1862,

- 16 First Class Freight Locomotives.
- 40 House Freight Cars, and
- 200 Gondola Cars, adapted to the transportation of Mineral Oil, Coal, Lumber, &c.

Bridges. During 1861, there were constructed at Altoona shops, 884 feet lineal of iron truss bridges for single track, including the new bridge over the Schuylkill river, on the Delaware Extension, and 48 feet of boiler-plate bridge for double track.

Coal Trade. The Broad Top Coal trade having become very active, in consequence of other sources of supply having been cut off by the rebel forces in Virginia, the number of Coal Cars contracted for last year, in connection with the Philadelphia and Reading R. R. Company, for use in that trade, was subsequently increased to 400, all of which have been placed upon the road, and have been kept in constant service. An additional increase would seem to be demanded by the wants of the trade.

In consequence of the Pennsylvania Railroad cars being all required to meet the demands of the through trade from the West, 350 Coal Cars have also been placed upon the road by the Gas Coal Companies operating mines in Westmoreland county, under agreement for their purchase, at a valuation, by

this Company, if it is deemed desirable hereafter.

Live Stock. The movement of Live Stock has been large, particularly since April last large amounts being forwarded on Government account. 100 Stock Cars have been added to the equipment during the year, but the pressure of the trade continues, and a further increase in the number of cars is needed to accommodate it. The Yards at Pittsburgh have been paved and otherwise improved, and those at Harrisburg have been enlarged, and increased accommodations added for the unloading, feeding, and sheltering of Stock.

The large Freight Station at Pittsburgh, known as the Duquesne Depot, was accidentally destroyed by fire on the 30th of July last; the destruction was total, nothing remaining standing but the foundation walls, and these were left in a dilapidated condition. It was replaced upon the same site by a frame structure 664 feet by 110 feet, at a cost of \$25,250 00. Great credit is due to the Engineer Department, for the energy shown in pushing forward, to an early completion, this important structure.

Second Track. Only 3 miles and 1,117 feet of Second Track extension were laid during 1861. The great number of the trains, and the frequency with which they pass over the road, are very destructive to the single track, and it is found to be exceedingly difficult for repair-men to keep it in proper condition; it is hoped, that during the coming year, such portions of the second track as are most urgently needed may be completed.

During the past year, the amount of transportation performed, and the number of trains run has been greater than any year since the road was opened.

The Report of the Master Machinist gives the following summary of the equipment and performance of machinery.

At the date of the last report there were 211 Locomotives on the line; since that time, 22 First Class Freight Engines, and 2 Light Passenger Tank Engines have been added to the equipment, namely:

18 First Class, built by M. W. Baldwin & Co. 2 Tank Engines for Delaware Extension, built by M. W. Baldwin & Co.; 2 Tank Engines (passenger) for Branch Roads, built by M. W. Baldwin & Co.; 1 First Class, with Phleger boiler, from R. Norris & Son; 1 First Class, from Lancaster Locomotive Works: making 24 new Engines purchased, of which number 6 have been taken to replace old and condemned machines, and their cost charged to repairs of engines—leaving 18 new numbers added to the equipment, and making a total of 229 Engines owned by the Pennsylvania Railroad Company January 1st, 1862—of which number 151 are in first-class condition, 43 are in running order, 32 are in shops for repairs, 3 are hired by the Pittsburgh, Columbus and Cincinnati Railroad.

During the year 6 old and worn-out Engines have been condemned and cut up, and their places filled by 6 new machines, as before stated.

Engines Nos. 92, 96, and 127, remains as last year, hired by the Pittsburgh, Columbus and Cincinnati Railroad Company.

The tabular statement of the Chief Clerk of the Motive Power Department, shows in detail the mileage, (Freight and Passenger) the cost of repairs, and the expenses of each Engine during the past year.

The following abstract shows that there have been run by Engines

WITH PASSENGER TRAINS,

Ret. Philadelphia & Harrisburg,	401,952 miles.
" Harrisburg and Altoona,	353,131 "
" Altoona and Pittsburgh,	363,054 "
Total	1,118,137 "

WITH FREIGHT TRAINS,

Ret. Philadelphia & Harrisburg,	761,822 miles.
" Harrisburg and Altoona,	1,108,233 "
" Altoona and Pittsburgh,	1,278,639 "
Total	3,148,694 "

WITH DISTRIBUTING TRAINS,

On the Philadelphia Division,	36,998 miles.
" Eastern	65,370 "
" Western	43,837 "
Total,	146,205 "
Passenger Engine Mileage,	1,118,138 miles.
Freight " "	3,148,694 "
Distributing " "	146,205 "
Mileage of Engines in 1861,	4,413,036 "
" " 1860,	3,633,422 "

The greatest mileage made with *Passenger* Trains. was as follows:

Between Philadelphia and Harrisburg, by Engine No. 27, Engineer *H. M. Zook*, 37,584 miles. Between Harrisburg and Altoona, by Engine No. 107, Engineer *Daniel Hoke*, 38,532 miles. Between Altoona and Pittsburgh, by Engine No. 24, Engineer *Robert H. Kerr*, 42,132 miles.

Average mileage with *Passenger* Trains:

Between Philadelphia and Harrisburg, 20,635 miles. Between Harrisburg and Altoona, 24,692 miles. Between Altoona and Pittsburgh, 27,673 miles.

The greatest mileage made with *Freight* Trains was as follow:

Between Philadelphia and Harrisburg, by Engine No. 145, Engineer *John McIntyre*, 30,237 miles. Between Harrisburg and Altoona, by Engine No. 110, Engineer *Philip Moore*, 36,391 miles. Between Altoona and Pittsburgh, by Engine No. 82, Engineer *M. A. Sweeney*, 33,627 miles.

Average mileage with *Freight* Trains:

Between Philadelphia and Harrisburg, 21,339 miles. Between Harrisburg and Altoona, 19,492 miles. Between Altoona and Pittsburgh, 28,673 miles.

Total average mileage with *Passenger* Trains, 23,790. Total average mileage with *Freight* Trains, 19,307 miles.

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	R to of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N. Y. & Pa.	48													
Baltimore and Ohio.....	Md.	320		\$ 13,111,800	\$ 10,781,833	\$ 566,070	\$ 3,922,203	\$ 2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5		1885	
do do											2,000,000	6		1880	
do do											700,000	6		1875	
do do											1,125,500	6		1867	
do Washington Branch.....	Md.	70		1,650,000							791,000	7		1866	
Bellefontaine and Indiana.....	Ohio & Ind.	114		1,859,813	1,250,750	139,129	314,090	8,795	Dec. 1860.	1st Mortgage.....	100,000	7		1870	
do do															
Buffalo and State Line.....	N. Y. & Pa.	121	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860	2d ".....					
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,072		1st Mortg. 1st Div.	595,000	6		1864	
Camden and Amboy.....	N. J.	96		3,98,400	8,820,000		1,997,065	733,950	Dec. 31, 1860	1st Mortgage.....	4,000,000	7		1861	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,355	Aug. 1, 1859	1st ".....	800,000	7		1864	
do do										2d ".....	80,000	7		1865	
do do										3d ".....	950,000	7		1865	
do do										4th ".....	1,365,000	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7		1865 & 1870	
do do										2d ".....	600,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.	922		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d ".....	1,500,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	4,000,000	10			
do do										2d ".....	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	414	Feb & Aug 1	
do do										2d ".....	3,600,000	7	414	Feb & Aug 1	
Chicago and Rock Island.....	Ills.	56	175	5,603,000	1,397,000		1,164,018	455,953	June 0, 1861	1st Mortgage.....	2,000,000	7	99	1870	
Chicago, Burlington and Quincy.....	"	614	138	4,669,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	1,750,000	7		1863	
do do										" 2d ".....	813,000	7		1860	
do do										1st Mor. Chi. & Aur.	391,000	7		1867	
do do										2d ".....	303,900	7		1869	
do do										1st "Cent. Mil. Tract	39,000	7		1864	
do do										2d ".....	215,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	60		2,155,800	1,356,000		614,224	174,593	Mar. 31, 1861	1st Mortgage.....	441,000			1867	
do do										2d ".....	950,000			1860	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d ".....	532,000				
do do										3d ".....	104,000				
do do										Income.....	305,509				
Cleveland and Mahoning	Ohio.	684		1,167,473	1,712,100	29,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7			
do do										2d ".....	4,900,000	7			
do do										3d ".....	341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	124	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	8,000,000	7	134	1860	
do do										2d " M. L. or 1st Ex.	1,180,000	7		1873	
do do										3d " 2d Ex.	1,160,000	7		1865	
do do										4th " 3d Ex.	1,154,000	7			
Cleveland and Toledo.....	Ohio.	464	148	3,343,800	3,650,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jan. 1st Div.	3,900,000	7		1867	
do do										" " 2d Div.	263,000	7		1872	
do do										2d ".....	265,000	7		1862	
do do										1st " Tol. Nor. & Cleve	521,000	7		1863	
do do										2d ".....	293,300	7		1864	
do do										Junction Income.....	44,000	7		1862	
do do										C. & P. Income.....	300,000	7		1864	
Cleveland, Columbus and Cincinnati ..	Ohio.	109	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000			1864 & 1890	
Cleveland, Painesville and Ashtabula ..	"	984		3,000,000	1,602,000	none	1,063,403	633,647	Nov. 13, 1860	1st Mortgage.....	564,000	7		1861	
do do										2d ".....	303,000	7		1862	
Columbus and Xenia.....	Ohio.	544		1,490,000	291,710	50,500	See L.	Miami.		Dividend.....	272,710			1800 to 1866	
Columbus, Piqua and Indiana	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,966	2,512,000					2d ".....	2,212,000	8			
do do										1st Mortgage.....	300,000	7			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	2,500,000	7		1875	
Detroit and Milwaukee.....	Mich.	186		No report						2d ".....	1,000,000	8		1866	
do do															
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		49,762	728,853	152,694	132,324	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		96,061	1,219,100	249,683	134,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.											
do do															
Galena and Chicago Union.....	Ills.	69	121	6,028,300	3,524,200	none	1,402,752	652,200	Dec. 31, 1860.	1st Mortgage.....	1,903,000		100	1862 & 1863	
do do										2d ".....	1,000,000		99	May 1, 1875	
Great Western	Ills.	175		1,600,000	2,391,000		45,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago ..	Wis.	54		400,000	No report										
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573		Land Mortgage.....	5,000,000	671			
Hannibal and St. Joseph.....	Mo.	206		1,041,000	10,551,000	220,306	993,907	512,933	Sept. 1, 1860.	Mortgage Conv.....	1,300,000	6		1873	
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug 31, 1861	1st Mortgage.....	4,000,000	7	102	1869 & 1870	
Hudson River.....	N. Y.	352	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7		1875	
do do										2d ".....	1,800,000	7		1875	
do do										3d ".....	1,800,000	7		1875	
Illinois Central.....	Ills.	654	455	15,654,900	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	2,000,000	7		1868	
do do										Construction.....	12,850,000	7	93	1875	
do do										".....	4,115,000	6		1875	
do do										Debentures.....	4,250,000	7			
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	60,000	7			
do do										2d ".....	578,000	10			
do do										Income.....	300,000	7			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,244	140,649	448,858	230,634		1st Mortgage.....	400,000	7		1866	
do do										2d ".....	400,000	7			
do do										Real Estate Mort.....	200,000	7			
Indianapolis, Pittsburgh and Cleveland ..	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860	1st Mortgage.....	649,800				
do do										2d ".....	314,000				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report								
Iron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.	86 1/2		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,018	Dec. 1, 1860	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860	1st ".....	29,000			1861	
Kentucky Central (Covington and Lexington).....	Ky.		99	Sold out under mortgage	2,930,000	337,532	426,408	227,534		2d ".....	392,000			1873	
do										1st Mortgage.....	1,000,000				
do										1st ".....	250,000				
do										2d ".....	1,000,000				
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiver.						3d ".....	600,000				
do										1st Mortgage E. D.	50,000				
do										2d ".....	1,000,000				
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report			1st Land Grant W D	4,000,000				
Lexington and Frankfort.....	Ky.		29	514,433	130,000		10,914	47,267	June 30, 1861	1st Mortgage.....	130,000				
Little Miami.....	Ohio.		61				1,530,030	529,981	Jan. 1, 1862	1st Mortgage.....	1,300,000			1883	
Louisville and Frankfort.....	Ky.		63	1,169,59	354,519		243,910	98,679	June 30, 1861	City Loan.....	174,000				
do										1st Mortgage.....	218,000				
Louisville and Nashville.....	Ky.		268	5,631,469	3,260,500	348,076	807,034	461,970	July 1, 1861	1st Mortgage.....	2,000,000				
do										1st " Lebanon Br.	400,000				
Louisville, New Albany and Chicago..	Ind.		288	2,500,000	3,000,000	201,000	645,827	371,402		1st " Memphis Br.	500,000				
do															
Madison and Indianapolis.....	Ind.		87	1,618,050	1,245,300	87,969	230,503	99,080	Dec. 31, 1860	1st Mortgage.....	600,000			1861	
Marietta and Cincinnati.....	Ohio.		207	8,561,213	190,458	108,130	43,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000			1868	
do										2d ".....	2,000,000				
do										3d ".....	1,000,000				
do										Sterling Income.....	333,000				
Michigan Central.....	Mich.		55 1/2	6,037,774	7,908,489	125,000	2,126,699	910,169	May 31, 1861	Domestic.....	9,500				
do										1st Mortgage Sterling	467,481			1872	
do										1st ".....	500,000			1869	
do										1st " Conv.	250,000			1870	
do										1st " annu.	250,000			1869	
do										1st " Dollar Conv.	2,500,000			1869	
Michigan South'n & North'n Indiana	Mich. & Ind.		24 1/2	9,018,200	9,714,704	437,886	2,075,459	1,039,929	Mar. 31, 1861	1st " S. F. C. Conv.	4,133,000			1882	
do										Mort. Mich. S. F.	991,000			1860	
do										" Nor. Ind.	981,000			1861	
do										" Goshen Line.....	1,168,000			1868	
do										S. F. Toledo.....	2,750,000			1865	
do										1st Mortgage.....	2,465,000			1877	
do										2d ".....	400,000				
do										2d ".....	20,000				
do										1st Mortgage.....	400,000				
do										2d ".....	600,000				
do										1st Mortgage.....	2,550,000			1891	
do															
do										1st Mortgage Conv.	1,000,000				
do										2d " S. F.	400,000				
do										Oskaloosa Div.....	1,425,000				
do										Land Grant.....	7,000,000				
do										Mortgages.....	711,000				
New Jersey.....	N. J.		33	4,397,800	682,000		992,767	579,961	Dec. 31, 1861	1st Mortgage.....	3,000,000			1873	
New Jersey Central.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,247	710,396	Dec. 31, 1860	2d ".....	4,000,000			1864	
New York and Erie Pref.....	N. Y.		61 1/2	Sold under mortgage			5,590,916	1,979,400	Sept 30, 1860	3d ".....	6,000,000			Dec 1, 1865	
do			37 1/2							4th ".....	4,900,000			Oct 1, 1875	
do										5th ".....	1,920,000			June 15, 1885	
New York and Harlem Pref.....	Conn.		31 1/2	5,717,190	6,035,752		1,142,251	433,716	Sept. 30, 1860	1st Mortgage.....	2,650,000			1873	
do			13							2d ".....	1,000,000			1864	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,373	Apr. 1, 1861	Mortgage.....	92,000			Dec 1, 1865	
do															
New York Central.....	N. Y.		83 1/2	24,000,000	146,300,000	none.	7,349,042	2,661,152	Sept. 30, 1861	Construction.....	3,000,000			Oct 1, 1875	
do										State Loan.....	2,000,000			June 15, 1885	
Northern Central.....	Md.		138	2,260,000	5,800,300	537,026	1,018,103	283,627	Dec. 31, 1860	1st Mortgage.....	2,000,000				
North Missouri.....	Mo.			2,437,300	4,350,000	93,796	96,731	153,669	Nov. 1, 1860	Construction.....	2,000,000				
Ohio and Mississippi, Eastern Div....	Ohio & Ind.		192	Leased	9,880,000	2,300,000	898,817		May 1, 1861	State Loan.....	4,500,000				
do										1st Mortgage.....	2,000,000				
do										2d ".....	316,900				
do										Income.....	4,637,820				
Ohio and Mississippi, Western Div....	Ills.		148		3,292,403		No report			State Loan.....	7,000,000				
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860	" S. W.	2,000,000				
do										Construction.....	4,500,000				
Pennsylvania.....	Pa.		359	13,261,960	17,163,817	367,489	7,200,060	3,646,938	Dec. 31, 1861	1st Mortgage Conv	4,900,000			1888	
do										2d ".....	2,319,000			1875	
do										2d " Sterling.	1,957,400			1875	
do										State Works.....	7,000,000				
Peru and Indianapolis.....	Ind.		74	1,100,000	820,000	80,000	No report			1st Mortgage.....	2,300,000			1884	
Philadelphia, Wil. and Baltimore.....	Del.		98	5,000,000	2,300,000		1,236,597	471,702	Oct. 31, 1860	Improvement.....	110,000			1863	
do										1st Mort. O. & P.	1,000,000			1865	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		467	Sold for Floating Debt.	10,192,155	1,757,233	2,335,333	761,555	June 30, 1861	2d ".....	730,000			1868	
do										1st " O. & I....	1,000,000			1872	
do										2d ".....	381,000			1873	
Pittsburgh and Connelleville.....	Pa.		49	1,755,826	1,200,700	67,869	80,555	29,690	Oct. 31, 1860	Pitt-burgh Subs'n.	500,000				
Racine and Mississippi.....	Wis.		104	2,705,720	1,410,900	1,085,328	220,850	68,433	May 10, 1861						
Sandusky, Dayton and Cincinnati..	Ohio.		170	2,097,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000			1866	
do										".....	997,000			1866	
do										".....	1,000,000			1875	
Sandusky, Mansfield and Newark....	Ohio.		125	848,770	1,285,200	132,063	195,074	31,167	Dec. 31, 1860	1st Mortgage.....	1,290,000			1866	
do			56	40,000	500,000	100,000	110,200								
Springfield, Mt. Vernon & Pittsburgh..	Ohio.		50	1,000,000	1,050,000	200,000				1st Mortgage.....	500,000				
do										2d ".....	400,000				
do										1st Mortgage.....	1,500,000			1870	
do										2d ".....	900,000			1865	
do										1st Mortgage Conv	1,440,000			1862	
do										2d ".....	200,000			1868 & 1870	
do										1st " Bel. & Ill.	317,000			1873	
do										1st Mortgage.....	2,000,000			1866	
do										1st Mortgage.....	2,400,000			Aug. 1, 1865	
do										2d ".....	2,500,000			Nov. 1, 1875	
do										Mort. Coupons....	98,049			1860 to 1865	

REPAIRS OF ENGINES

Cost of Repairs, Philadelphia Division, (2 new Engines being charged to repairs.) \$88,565 10
 Cost of Repairs, Middle Division, 95,569 38
 " Western Division,
 (4 new Engines being charged to repairs,) 160,334 39

Total for 1861, \$344,468 87
 " 1860, 321,706 82

Increase, \$22,762 05

The cost, (\$53,240 16) of 6 First Class Freight Engines, before referred to, bought in place of 6 condemned Engines, has been added to Repairs of Locomotive Account, giving an increase of \$22,762 08 in the account; with an increase of 779,594 miles run by Engines.

The average cost per mile run for repairs of Engines for 1860 and 1861, with the cost of new Engines added in, in both years, compares as follow:

For 1860, per one hundred miles run, \$8 85
 " 1861, " " 7 81

Being a decrease per 100 miles of \$1 04

The comparison of the average mileage of Freight and Passenger Engines with the two preceding years is as follow:

	Passenger.	Freight.
1859,	20,645 miles.	15,868 miles.
1860,	22,858 "	18,318 "
1861,	23,790 "	19,317 "

Increase over '60, 932 per eng. 999 p. eng.

A continued saving in cost of fuel has been effected, as is shown by the following comparative statement:

Total No. of miles run.	Cost of Fuel.	Cost of Fuel per run of 100 miles.
1858, 3,189,486	\$262,120 40	\$8 19
1859, 3,294,220	250,138 75	7 59
1860, 3,633,442	260,679 57	7 17
1861, 4,413,037	283,083 07	6 41

Being a saving of 76 cents per 100 miles over the cost of last year.

As more of the Engines are adapted to the use of coal as fuel, and the men become more accustomed to the management of it, we may hope for a continued economy in its consumption for several years to come.

Homogeneous cast-steel plates for five boxes are in course of trial in one of our Engines; if they answer the purpose as well as copper and it is confidently believed that they will, a large saving in first cost will be effected. Iron fire boxes for coal burning Engines have not been found by us to be economical, and the high cost of copper has swelled largely the cost of repairs of our Engines.

Fifteen new copper fire boxes, and one cast steel fire box, have been put in service during 1861; and Engine repairs generally, have been done in as thorough a manner as the heavy demands upon our power would permit.

Passenger Cars have been subjected to severe usage in consequence of the large numbers of troops carried in them, and many of them require considerable outlay to put them in complete order.

The lighting of cars by gas is found to work

well, but is capable of further improvement. Gas fixtures are being placed in all Passenger Cars rebuilt.

All Passenger Cars that have been rebuilt this year have raised roofs and improved ventilation.

To prevent the escape of live stock heavy bars have been placed in 345 Stock Cars, inside of the doors, and double decks for carrying small stock have been added to 97 cars.

Our Car Equipment, January 1st, is as follows:

Wide passenger cars, 8-wheel, 63; narrow, 21; emigrant, 29; baggage, 34; express, 10; house ordinary freight cars, 8-wheel, 1,485; horse powder cars, 8-wheel, 14; stock cars, 8-wheel, 400; gondola do. do. (coal and lumber), 665; Gondola do. do. (wood) 72; drop-bottom coal cars, 8 wheel, 200; house freight cars, 4-wheel, 109; coal do do., 127; gravel do. do., 88; road and hand do. do., 234.

The total number of cars belonging to the Pennsylvania Railroad Company, and in use on its line, is 2,993 8-wheeled cars, and 558 4 wheeled cars.

In addition to the above, the Pennsylvania Railroad Company owns, on the Pittsburgh, Fort Wayne & Chicago Railroad, 50 8-wheel stock and 50 8-wheel box freight cars, which that company pays for by monthly installments; and on the Pittsburgh, Columbus & Cincinnati Railroad, 6 passenger, 55 8-wheel box freight, 36 8-wheel stock, 2 8 wheel trucks, and 20 4 wheel coal cars.

Total cars owned by Pennsylvania Railroad Company, 3,192 8-wheeled cars, and 578 4-wheeled cars.

INTERNAL COMMERCE OF THE UNITED STATES.

A Paper Read before the American Geographical Society, by HENRY V. POOR, Esq., a Member of the Society.

It is characteristic of this country that its commerce and wealth, and consequently, its population, are creations rather than growths. These could never have existed, unless the conditions on which they are based had been supplied by man. The natural routes of commerce, the great rivers of the Continent, had their outlets in inhospitable climes, and far distant from the central portion of the Atlantic slope, which was better fitted than any other portion of the Continent for commercial and manufacturing enterprise, and as the seat of a dense population, and at the same time most conveniently placed in reference to the Old World. The proposition set before our people, consequently, was to correct this oversight of nature; to recast a Continent, and adapt it to their convenience and wants. Nature has taken good care, however, that the task should not be too arduous to discourage the attempt, by the slight elevation she gave to the interior of the Continent, and in the gentle and uniform slopes of its great plains. In its centre were the great lakes, so nicely poised, as to give almost equal choice of outlet, either into the Gulf of Mexico, Hudson's Bay, or the Gulf of St. Lawrence. A low ridge, of eight feet in elevation, is the only barrier between them and the Mississippi,

pi, which was undoubtedly at one time their outlet. The waters of the two mingled in times of flood, allowing the barks of the natives to pass from one to the other. On the North, a similar means of communication exists between the lakes and Hudson's Bay, although the dividing ridge is somewhat higher. The great depression in the Continent, however, in ascending from the Gulf is to be found in the Valley of the Mississippi and the Red River of the North, whose waters also mingle, so that, at certain periods of the year, boats pass from one to the other. But neither the inhospitable shores of Hudson's Bay, or the Gulf of St. Lawrence, or the insalubrious Delta of the Mississippi, were adapted to become the seats of a people excelling alike in agriculture, commerce and the mechanic arts, which require for their development the temperate and bracing climate of the Middle and Northern States, beneath whose soil Providence has accumulated in the greatest profusion the two prime agencies in modern civilization—iron and coal.

In the absence of navigable water-courses the people of the Atlantic slope were without any means of opening communication with the interior at all adequate to the wants of an extensive commerce. The quality in the soil that gave it fertility, rendered it entirely unfit for good earth roads. The report made to the legislature of this State in 1817, which laid the foundation for the construction of the Erie Canal, stated that the cost of transporting a ton of produce from Buffalo to Albany was \$100, and the time required twenty days. At that time the produce of Western New York was either floated down the Susquehanna or Delaware rivers to Baltimore or Philadelphia or the St. Lawrence to Montreal or Quebec. The area of the trade of the city of New York, which, by virtue of its public works, now lays the whole country under tribute, did not extend in any direction twenty miles from the tributaries of the Hudson. All beyond is an acquisition of her enterprise and skill, which have annexed territories far exceeding those ever annexed by the sword, and hold them by a tenure ten times as firm—that of mutual interest and dependence.

The first well-matured plan for an improved line of communication between the Atlantic Slope and the Great Valley was a proposition for a canal upon the route of the Potomac and Mohogahela rivers, by the father of his country—Gen. WASHINGTON. This project was a subject uppermost in his mind in his first journey across the mountains. Upon his entrance into the House of Burgesses of Virginia, he called its special attention to the subject, and proposed a series of surveys of the route. It was long, however, before it was ascertained that a much better route existed in the valley of the James and Kanawha rivers. The improvement of the first named river, with a view of ultimately carrying a water-line across the mountains, was commenced in the last century. But Virginia long since tired of the work. Even Washington himself lived to see that his own State was not to reap the glory or advantage of first opening through her own territory the great highway which was to be freighted with a commerce vastly richer than that even fabled of Ormus or of Ind. In after years, when he stood upon the summit of that vast plain from which the waters flow by gentle descent into the Lake Ontario and the Huron, and over which, through the Erie Canal, the waters of the St. Lawrence turned into the Atlantic, he saw that the march of empire was not to be

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, MAY 1, 1862.

THE RAILROAD RECORD,

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Depart. Arrive.

Cincinnati, Hamilton & Dayton—		
Logansport & Chicago Express...	7.30 A. M.	9.15 P. M.
1st R. I. C. T. & Sand. Mail.....	7.30 A. M.	5.45 P. M.
Dayton & Toledo.....	7.30 A. M.	9.15 P. M.
2nd. Ham. Accommodation.....	9.00 A. M.	8.10 A. M.
3rd. Richmond, Day. & Bell's Ex.....	3.30 P. M.	9.15 P. M.
4th Dayton, Tol. & Detroit Ex.....	5.30 P. M.	11.25 A. M.
Logansport and Chicago Express.....	7.30 P. M.	8.10 P. M.
Glendale Accommodation.....	7.30 P. M.	7.00 A. M.
6th Columbus Express.....	10.00 P. M.	7.40 A. M.
Little Miami—		
Morrow Accommodation.....	7.40 A. M.	1.30 P. M.
2d. Day Express.....	9.45 A. M.	6.50 P. M.
Camp Dennison Accommodation.....	3.15 P. M.	6.10 P. M.
3d. Columbus Accommodation.....	4.00 P. M.	10.31 A. M.
4th Xenia Accommodation.....	5.50 P. M.	8.00 A. M.
Marion & Cincinnati—		
1st. Mail Express.....	8.10 A. M.	10.05 A. M.
2d. Accommodation.....	3.30 P. M.	5.45 P. M.
Cincinnati, Wilmington and Zanesville—		
1st. Mail Express.....	9.45 A. M.	8.00 A. M.
2d. Accommodation.....	5.50 P. M.	6.45 P. M.
Ohio & Mississippi—		
1st. Mail Train.....	7.00 A. M.	10.05 P. M.
2d. Aurora Accommodation.....	3.15 P. M.	7.55 A. M.
3d. Express Train.....	7.20 P. M.	8.25 A. M.
Indianapolis & Cincinnati—		
1st. Mail.....	5.50 A. M.	9.45 A. M.
2d. Accommodation.....	2.45 P. M.	5.00 P. M.
3rd. Chicago Express.....	5.00 P. M.	12.20 A. M.
Kentucky Central—		
1st. Express.....	6.38 A. M.	10.44 A. M.
2d. Accommodation.....	2.24 P. M.	7.10 P. M.
Cincinnati & Chicago Air Line—		
Mail.....	7.30 A. M.	9.15 A. M.

THE NATIONAL FINANCES.

This subject next, and even necessary to the vigorous prosecution of the war and the quelling of the rebellion, is the most vital subject at present before the country. All others are but trifles in comparison. It is a new and untried experiment, and calls for the largest wisdom and most expanded views of political economy that the law-making power is capable of exercising to develop such a system as shall be at once just and equal in all its bearings, and yet produce the amount required by the necessities of the Government. Other countries, with less expansive resources than our own, have no difficulty in producing a much larger revenue than is required to meet our necessities; but then their burdens have been placed upon them by degrees, and the people have become accustomed to the load, while we, like an unbroken colt, may chafe a little at first but that is no evidence of our inability to carry the load. Russia, during the Crimean war, added \$500,000,000 to her indebtedness. France, in the twenty years past, has increased her national debt \$1,200,000,000. Austria, in a few years, has also added \$1,000,000,000 to her liabilities. These amounts are simply added to their previously enormous national debts, while the total amount of our own national debt, supposing the war to be closed up in the next twelve months, will probably not exceed \$1,000,000,000. The interest annually paid by England on her national debt amounts to \$130,000,000, and her total expenditures \$350,000,000. We therefore argue that there will be no real difficulty in our government finally adopting a plan, whereby an annual revenue of at least \$250,000 will be raised, which will be amply sufficient to pay the \$70,000,000 interest and meet all the ordinary expenses of government, and furnish a sinking fund that will before many years extinguish the national debt, and again leave us an untaxed and unburdened people.

How to apply the tax is now the great question in point. We cannot but think that the more simple the system and the less complex the method, the better it will be for all. We are all willing to pay, but desire to have it divided equally, so that no one class shall be crushed out, and another made to profit by the imposition of the burthen.

The following programme, advanced by the New York Chamber of Commerce, presents very many advantages over the intricate and complex bill now under discussion by Congress. The Memorialists truly say, "That in the selection of subjects of taxation, the necessities of life should be so universally and equitably taxed as to make the burden fall on all classes according to each man's ability to pay, and as lightly as possible; while the luxuries of society, or the enjoyments of the rich, should contribute a large share of the public revenues; and finally, that the lead

ing products of the South, which have been among the causes of the existing rebellion, should be made to contribute toward the speedy restoration of peace, and to the final payment of the public debt.

Assuming these truths to be self-evident, your memorialists pray that Congress will, at an early day, frame a revenue system, based upon seven subjects or departments of taxation, viz:

From all sales of goods and merchandise and other property, at retail and wholesale, a tax of 1 per cent, yielding, your memorialists believe, the annual sum of	\$115,000,000
From the tariff, the sum of	50,000,000
From an excise or tax on cotton of two cents per pound	24,000,000
From an excise or tax on tobacco of 20 cents per pound	30,000,000
From an excise or tax on whisky and other liquors of 25 cents per gallon	25,000,000
From an excise or tax on malt liquors, 5 cents per gallon	8,000,000
From a direct tax upon real and personal property	12,000,000
Total	\$264,000,000

This will produce all that the wants of the governments will require, and although some modifications would no doubt be desirable, yet in the main it would have an equitable bearing. The memorialists give the following reasons in defense of their above schedule, "that from extensive inquiries and calculations recently made, it appears that the sales of goods and merchandise of all kinds in the United States annually amount to at least \$11,500,000,000; and that the tax of 1 per cent on the frequent sale or transfer of this property, while it would produce the large sum of \$115,000,000 to the public treasury, would be so light upon the individual consumers, that the people would scarcely feel it.

That from the present, and from reasonable estimates of the quantities of the foreign goods imported during the present and approaching fiscal years, the tariff, as now framed, will yield a no less sum than \$50,000,000.

That an excise tax upon cotton, as one of the prominent or leading products of the South, while it will yield a revenue of \$24,000,000 on the estimated reduced crop of three millions of bales, will not encourage competition in the growth of this staple in foreign countries; and that the United States must continue to be, as heretofore, the main reliance of Europe for their supply of this article; and further, that the returns of peace may be relied upon to restore to the country an aggregate annual production of four millions of bales, which will still further contribute, in future years, to the proposed revenue from this source.

That the proposed excise or tax upon tobacco, as an article of luxury, will yield this year the sum named; and that from the peculiar fitness of the climate and soil of the tobacco-producing States, no foreign competition need be feared in their production of this

important staple, and contributing materially to the wealth of this nation.

That the excise or tax on whisky and other domestic liquors, while it is less than a fifth of the tax levied on such products in other countries, will yield a permanent revenue of at least twenty five millions of dollars, and prospectively nearly double that sum.

That such a tax will have a highly conservative influence upon the community at large, by reducing intemperance, which is the principle source of the crime and poverty prevailing in many portions of the land.

Your memorialists urge that an excise of five cents per gallon on malt liquors will scarcely be felt by the tax-payer; and that, as articles of luxury, they should be made to contribute a large share toward the public revenue.

Your memorialists further represent that these taxes, when imposed and realized, will obviate the necessity of laying a further burden upon real and personal property, which already in local districts and for State revenue are heavily taxed; and that the present law, whereby \$20,000,000 (or less than \$1 per capita) are to be realized, is sufficient on this head."

BALTIMORE AND OHIO R. R.

No one interested in the welfare of our country, and especially of the West, can feel otherwise than gratified at the opening anew of this great artery of commerce, through which so much of the life-blood of the trade of the Ohio valley has, for the past ten years, flowed. Neither can they help feeling a just and patriotic indignation at the vandalism and destruction perpetrated on this *martyr road* by the ruthless hands of the rebels. A faint idea of this wanton destruction of property, and the energy of the officers of the Company in restoring to the West this great outlet, may be obtained from the following extract of a letter addressed to the Baltimore American, by a party who accompanied the excursion trip over the road on the 1st. of April.

Full of attractiveness as the blue landscape is, there was nothing special to arrest the eye on this our war trip (if by license of fancy I may so distinguish it) until we arrived at Point of Rocks, where we found the old familiar rock-face spoiled by the absence of one of its most noticeable features; the very nose of it, that mighty boulder which has always so prominently identified that part of the road, was gone—lopped off by the rhinoplasty operation of the Rebel Ashby. It is as the maiming of an old friend's face, and we who have so long loved the picturesque spot will not easily become reconciled to its sudden deformity.

At Point of Rocks and Berlin were also the ruins of bridges burned by the Rebels, and at Harper's Ferry (henceforth memorable in our history) were the wrecks of the famous armory, and the scarcely less famous bridge;

this last was a sight to make engineers, if not angels, weep, and as the train rattled with inspiring confidence over the Company's Phoenix that has arisen so rapidly from its own ashes, we turned our eyes almost instinctively toward the countenance of the man to whose skill and zeal that bridge has been a monument. It would have been strange indeed if in the face of Benjamin Latrobe, we had found no emotion. The ghost of that bridge is the confederate John Brown of the Baltimore and Ohio Railroad.

As we flew over the Company's handsome new track, we forgot for a while the shells and wrecks and skeletons we were leaving behind us; but the approach to Martinsburg recalled them to our mind, with all the eloquence of its stone and iron havoc. I am sure that the excursion over this part of the road will constitute an event truly prominent in the lives of all who participated in it, and will serve for the theme of many a fireside story to hold hereafter our little ones in wrapt attention, as with earnest eyes and parted lips and throbbing hearts they listen to the story of the "Great Rebellion."

At Opequan some seventy or eighty "hopper" cars, filled with coal, had been hurled into the deep gully beneath, after the bridge was burned; and the coal being then ignited, the iron frames of the hoppers were melted like candles in the furious heat. Near Back Creek, ten miles west of Martinsburg, three important bridges—one of them an eighty-foot stone arch, of the first construction—had been ingeniously shattered, and at the same time some three hundred wooden, and nearly as many hopper, cars were melted and consumed in a fire-bed with the very coal they had themselves contained, and which burned for six weeks, through rain and wind. I am assured that the hopper cars so destroyed, *on this road alone*, may be estimated at many hundreds; and when we consider that their average cost is about \$550, a thrilling idea may be formed of the Rebels' ruthlessness and rage. Forty-seven locomotives were utterly demolished by fire, or almost irreparably injured—all their light machinery being first stripped off. In addition to these, there were thirteen they attempted to destroy with sledge hammers.

Extensive machine shops, containing not less than forty thousand dollars worth of machinery and repair tools, were completely gutted, and the machinery hauled off Southward. They also tore up and removed about forty-two miles of rail, evidently with the notion that they had effectually disabled the Baltimore and Ohio Railroad for years to come. Such, without doubt, was General Jackson's impression, and it is not difficult to imagine his surprise and incredulity when he was assured that the crippled machinery amounted to less than one-fifth of the great Company's running stock.

It has been more than once reported that

immense amounts of machinery and running gear, which had been hauled away in overloaded wagons by the Confederates, were scattered over the turnpike from Martinsburg to Winchester; piles of such material have been found along that route.

Between Harper's Ferry and Cumberland three-fourths of the water stations had been either burned or blown up. In many places there are immense accumulations of car-wheels, evidently gathered preparatory to removal southward; and although they burned so much stock, it is estimated that they carried off two hundred and fifty trucks, six locomotives and one hundred equipped cars. Indeed, it is positively asserted that the very cars which transported Johnson's reinforcements to Beauregard, and completed the headlong panic at Bull Run, were taken from this road.

But already the Company, by some marvelous resurrection—clothing the skeleton with flesh as it were—have restored fourteen of the burnt locomotives, and I know not how many iron cars, all of which the Rebel Generals must have confidently "counted out." Already the materials of stone and iron, to supply permanently the places of the rough but substantial bridges of wood over which we have just passed, and to reproduce those magnificent structures for which this road has ever been famous, are being prepared in Baltimore. It is indeed an extraordinary achievement of enterprise, vigor and scientific skill which could thus do in twenty-seven days the work of four months, and restore this mighty conduit of commerce to its function unimpaired. The credit of the achievement is truly great, and belongs almost wholly, I am sure, to Mr. W. C. Quincy, the Acting Master, and Mr. W. E. Porter, Assistant Master of Road, gentlemen both of eminent qualifications as mechanics and practical engineers.

It was, indeed, a strange and picturesque panorama of the havoc and hurly burly of war through which we were whirled on our way to Wheeling, and yet I can confidently affirm that no Sunday School excursion in the palmiest days of peace was ever safer, more punctual, or more happily social than this our re-opening trip to Wheeling. The broken columns of bridges, the shattered arches, the masses of rusty and half rotten iron, the warped, gnarled and writhing strips of rail, the skeletons of locomotives, were all but as the Indian mounds on the Ohio—just so curious and just so harmless—to us, as we rattled over the sturdy new bridge and clattered over the bright new rails in assured security and comfort, occupied only by the interest and wild picturesqueness of a road which now combines in so wonderful a degree the romantic with the useful.

Here, for instance, was Paxton's Cut, which now we passed as comfortably as an invalid might be wheeled over a garden walk—it is

but a few months since the Rebels strove to blast it, and strew the iron road with its debris.

Here, too, was the bridge over the Great Capon, twice destroyed by Jackson, once when he attacked Hancock, now as complete and sturdy as though not a splinter of it had ever been disturbed.

And here was Paw Paw, where 9,000 men, with cannons booming and horses prancing, saluted the dead body of Lander as it passed on its way to Baltimore, now as tranquil as a harvest field, save for the cheering of the soldiers as we flashed past.

And here was the bridge over Patterson's Creek so lately burned by that noted partisan leader, Sheets, now as firm and faithful beneath our whirling wheels as the Carrollton Viaduct.

Full of exhilaration were the long trains of cheering soldiers, fairly yelling to the old familiar music of our rattling train, once more bound to Wheeling; full of exhilaration, indeed, the roar of a hundred heavy guns with which delighted Wheling greeted us; but fuller of an imposing, patriotic significance, for the great truth they all, as with one tongue, proclaimed was that the Baltimore and Ohio Railroad Company believe in their iron bond of progress and mutual reliance, which grandly binds together the East and the West, and is called by a name that can express nothing less than energy, extension and irrepressibility.

BALTIMORE.

RAILROADS IN NEW JERSEY.

Camden & Amboy Railroad.—Capital Stock of the Railroad, \$2,710,800; capital stock of Canal, \$2,298,400. The funded debts are: Loan 6 per cent., \$800,000; loan 5 per cent., \$210,000; loan 6 per cent., \$225,000; loan 6 per cent., \$367,000; loan 3 per cent., \$800,000; loan 6 per cent., \$1,700,000. Also a loan authorized by the stockholders for straightening and doubling track, of \$2,500,000. Of this loan only \$867,000 have been issued. In addition to these there has been a loan for £185,000 sterling for the stock of the Philadelphia & Trenton Railroad. Also a loan of \$1,175,000 to the Belvidere Delaware Railroad and branches, and Freehold & Jamesburgh Agricultural Railroad. Also a premium loan in England of £48,333 for the extension of the sterling loan to 1880. A sinking fund has been established for the redemption of said loans. The cost of the Delaware & Raritan Canal was \$3,255,302 55; of the Railroad, \$5,918,658 15. Receipts of the Canal last year, \$469,895 73; expenses, \$147,509 53, leaving net \$312,387 20. Receipts of Railroad were \$2,058,989 65; expenses, \$1,145,159 85, leaving net \$963,829 80.

Central Railroad Company.—Capital stock, \$3,630,000, first mortgage bonds, \$1,400,000;

second mortgage bonds, \$600,000; quarterly dividend 2½ per cent., due Jan. 15th, \$90,750; interest accrued, not yet due, \$47,833 33; accounts payable, \$29,057 57; balance to credit of revenue fund, \$172,855 39. Total, \$5,970,496 29.

Cost railroad, etc., \$4,904,667 99; equipments, \$504,500; ferry-boats, etc., \$426,407 81; cash and accounts receivable, \$134,920 49. Total, \$5,970,496 29.

Receipts last year—Passengers, \$222,089 93; merchandise, \$382,598 75; coal, \$568,275 83; mails and express rents, etc \$28,931 09; total, \$1,201,895 50. Expenses, \$522,452 30. Net earnings, \$679,443 30. Dividends, amounting to ten per cent., made during the year.

Millstone & New-Brunswick Railroad Company.—Capital stock, \$102,365; debt, \$8,749; cost, \$111,114; receipts last year, \$8,385 02; expenses, \$4,653 22; net earnings, \$3,731 80.

Hackensack & New York Railroad.—Capital stock, \$70,000; less not paid, \$3,000—balance, \$67,000. Mortgage bonds, \$40,000; less not issued, \$6,000. Unsecured debt, \$7,000; cost of main line, \$108,000; cost of Lodi Branch, \$20,000. Receipts past year, \$15,700; expenses, \$15,200.

On New Jersey Railroad, 9 killed and 5 injured during the year.

Millville & Glassboro' Railroad.—Capital stock, etc., \$189,998 56; cost of road, \$190,422 06; receipts last year, \$12,231 40; expenses, \$8,910,87.

Patterson & Hudson River Railroad.—Capital stock, \$630,000; cost, \$630,000. Road is leased and worked by another company, which pays \$53,400 rent per annum. Dividends of 4 per cent are paid semi-annually. Seven lives lost by accident.

Camden & Atlantic Railroad.—Capital stock paid in, \$899,363 56; funded debt, \$1,037,375 80; floating debt, \$92,211 20; cost of road and equipments, \$1,833,934 88; receipts during past year, \$99,432 61; expenses, 69,356 70.

Morris & Essex Railroad.—Capital stock, \$1,155,800; funded debt, \$340,000; contingent fund, \$260,181 11; cost of road, etc., \$1,757,991 12; receipts past year, \$210,984 01; expenses, 121,949 41; interest, 22,543 70. Dividends have been paid amounting to \$81,046; passengers carried, 456,107; miles run, 155,000. Three lives lost by accident.

Sussex Railroad Company.—Capital stock, \$187,776; funded debt, \$266,354 86 floating debt, \$3,021 18; cost of road, etc., \$417,143 04; receipts during the past year, \$23,811 51; expenses, \$13,745 99; no dividends.

Belvidere Delaware Railroad.—Capital stock, \$997,862 24; funded debt, \$2,082,000; special loans, \$75,086 70; temporary loans, \$81,105 31; cost of road and equipments, \$3,134,656 39; receipts during past year, \$241,502 64; on the Flemington Railroad, \$11,599 94; expenses, \$162,647 68.

Morris Canal Banking Company.—Capital stock, \$2,200,000; debts, \$773,000 22; cost of

canal, etc., \$2,882,544; income during past year, \$290,890 83; navigation, \$29,292 25; repairs, \$81,458 90; superintendence and management, \$32,599 56; dividends paid, \$138,000.

West-Jersey Railroad.—Capital stock, \$556,370 43; loan at 6 per cent., \$210,500; debt, \$23,075 82; cost, etc., \$780,455 05; receipts past year, \$34,801 76; expenses, \$17,645 47; passengers carried, 96,866½.

Newark & Bloomfield Railroad.—Capital stock, \$103,850; cost of road, etc., \$110,098 47; receipts past year, \$16,736 65; expenses, \$13,359 80. Dividend of 3 per cent. declared.

Flemington Railroad.—Capital stock, \$150,011; debt funded, \$93,100; other debts, \$91,673 66; cost of road, \$287,086 74; receipts past year, \$11,599 94; expenses, \$12,838 95.

Freehold & Jamesburgh Railroad.—Capital stock, \$230,844 80; cost of road, 231,173 96; receipts past year, \$31,683; expenses, \$21,487 85.

Peterson & Ramapo Railroad.—Capital stock, \$248,009; funded debt, \$100,000; other debts, 1,089; cost of road and equipments, \$350,000; income (rent from Erie Road), \$26,500; dividends paid from earnings, 5½ per cent., \$13,020. This road is leased to the Erie Road.

Warren Railroad.—Capital stock, \$1,276,000; debts, \$712 92, which is the amount of cost of the road; receipts, \$220,827 12; expenses, \$114,830 10.

Northern Railroad Company.—Capital stock, \$156,850; funded debt (bonds), \$200,000; floating debt, \$60,785 73; floating debt, unadjusted (estimated), \$10,000; cost of road and equipments, \$411,929 16; receipts for the year ending Sept. 30th, 1841, \$890,804 41; expenses, \$80,050 38; passengers carried, 131,867½; no dividends.

SOUTH PENNSYLVANIA OR SHERMAN'S VALLEY RAILROAD.—A report of a survey for the above railroad made by J. Worrall, engineer, has recently been issued. It proposed the location of a road from Harrisburg to Bridgeport, Bedford county, and thence to West Newton, on the Youghiogony, in Westmoreland county, traversing in addition the counties of Somerset, Fulton, Juniata, and Perry. The engineer thus speculates as to the commercial importance of the district traversed:

A branch line of some 8 miles would give access to the south side of Broad Top, where the magnificent coal of those measures—about 120 square miles in area—would be rendered more accessible to market by from 25 to 30 miles than it now is.

As for iron ore, it is difficult to say where it does not exist in abundance, at points quite accessible to our line; one or two of our railroad excavations being in the very ore itself.

Several mineral springs are also quite close to us—the Warm Spring of Perry county, and the well known Bedford Springs among the number; the latter being made by this line

but a few hours more distant than Saratoga is from New York, and being easily reached from that city, Philadelphia, or Baltimore, in a single day's ride.

At West-Newton some thirty miles of railway would connect us with Washington, Pennsylvania, a point about thirty-five miles from and now connected by railroad with Wheeling, Virginia, the Western terminus of the Baltimore and Ohio Railroad.

The face of the country along our line very much resembles the red shale country of New Jersey, through which the New Jersey Central Railroad passes. The same rich soil, the same occasional limestone dykes, the same abundant character of forest, which in that part of New Jersey originally existed, but which the more dense populations have thinned and brought under cultivation.

The vegetable products along this road would support it alone; the mineral products added would make it highly profitable, even if it should not prove to be the track for traffic between the East and the West—excelling all others in easy graduation, falling short of all others only in length.

There are two sources other than local subscriptions from which the road might be built, namely: 1st. The interest of the Philadelphia and Reading Railroad Company; 2d. The interest of the Central Railroad of New Jersey and its connections.

The Chicago Journal furnished the following summary of the provisions of the article in the new Constitution of Illinois relative to bank and currency:

It prohibits any banking company, corporation, or association in this State. This portion went into effect on the day of its adoption by the Convention, and will remain in force unless rejected by the people at the election in June.

It provides that no bill, check, draft, note, or other instrument, written or printed, for the payment of or intended to circulate as money, of a less denomination than ten dollars shall be uttered or passed in this State after the adoption of the Constitution; that no such bill, note, or draft of a less denomination than twenty dollars shall be passed after 1864; and after 1866 no bank bills shall be uttered or passed in this State.

It imposes upon the General Assembly, at its first session, the duty of providing by "fines, penalties, and forfeitures," for the enforcement of the provisions in relation to the circulation of bank bills. It also prohibits any corporation with power to receive deposits or discount notes or bills, or deal in exchange, gold or silver, or loan money on real or personal property. It also prohibits the enlarging, reviving, or extending of any bank charter now existing, and also prohibits the Auditor of State from issuing bank bills to any of the existing banks. The article is to be voted upon separately from the Constitution. If

some of the provisions could be adopted and others rejected, it would be well enough, but all must be taken or none.

The effect of these various provisions will not be readily discovered unless the present constitution, the banking laws now in force, and the wild-cat banks existing under it, are also taken into consideration.

If this article is adopted, then all bank bills will be excluded from the State, except the bills of the Stump-tail Illinois Banks. These can not be excluded unless they have forfeited their charters. No constitutional provision can reach them. They have vested rights of which they cannot be deprived by a law or constitution. We state this on the authority of the highest judicial tribunals in this country.

INTERNAL COMMERCE OF THE UNITED STATES.

(concluded.)

The following statement will show the length of Canals in the United States at the period named.

Northeastern States.

Maine.....	50.50	
New Hampshire.....	2.13	
Vermont.....	1.06	
Massachusetts.....	6.60	
Connecticut.....	5.50—	65.19

Middle Atlantic States.

New York.....	1,039.86	
New Jersey.....	148.70	
Pennsylvania.....	1,349.00	
Delaware.....	13.50	
Maryland and D. C.....	191.00—	2,742.06

Southern Atlantic States.

Virginia.....	188.98	
North Carolina.....	13.50	
South Carolina.....	52.50	
Georgia.....	28.00—	382.98

Gulf States.

Louisiana.....	24.74—	24.74
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Southern Interior States.

Tennessee.....	51.70	
Kentucky.....	486.50—	538.20

Northern Interior States.

Ohio.....	796.00	
Michigan.....	542.00	
Indiana.....	102.00	
Illinois.....	20.00—	1,461.00

Total.....	5,214.18	
Add railroads.....	31,168.76	

Total mileage of railroads and canals 36,382.94

But what chiefly concerns us are the results of this vast system—the commerce and wealth it has created. It is here that conjecture becomes an element in our calculations. The Federal Government utterly ignores what is regarded a most important function with others—a knowledge of the extent and value of the internal commerce of the country. State Governments have been almost equally indifferent. It is to make up for such neglects that our Society was instituted. What individuals and institutions like our own do not accomplish will be left undone. We have in this State, fortunately, some data with which we can commence, and which, with statements furnished by Railroad and Canal Companies, will enable us to estimate approximately the value of the tonnage of our public works. Upon the canals the tonnage is both classified and its value estimated as a basis for the imposition of tolls.

This tonnage for 1860 with the valuation was as follows:

CANALS.

	Tons transported.	Val. per ton.	Aggregate value.
Prod. of the forest.....	1,509,977	\$7	\$10,554,723
Prod. of animals.....	19,882	253	5,030,061
Vegetable food.....	1,659,158	30	49,710,833
Other agricul. prod's.	3,714	29	1,089,072
Manufactures.....	268,759	30	8,413,177
Merchandise.....	250,360	337	84,260,425
Other articles.....	938,364	13	11,389,907

Total.....4,650,214 :37 \$170,840,198

The Railroad Companies are required to classify a report of the amount of their tonnage, but not the value of the same. I give the classification and amount, with the estimates by myself.

RAILROADS.

	Tons carried.	Val. per ton.	Total value.
Prod. of forest.....	373,124	\$20	\$7,468,480
Prod. of animals.....	895,519	200	179,103,800
Vegetable food.....	1,103,640	50	55,183,000
Other agricul. prod.	143,219	15	2,148,055
Manufactures.....	511,916	250	127,979,000
Merchandise.....	783,811	500	391,805,500
Other articles.....	930,244	10	9,302,440

Totals.....4,741,773 \$163 \$773,085,500
Add ton. of canals,4,659,214 37 170,849,198

Totals.....9,391,987 \$104 \$943,935,698

The value of the tonnage carried on railroads is from estimates of experienced forwarders. The correctness of these estimates is an important subject of inquiry as furnishing data applicable to the tonnage of all the public works of the United States.

The products of the forests, which embrace the more valuable kinds of lumber, are put at \$20 per ton, which is about equivalent to a thousand feet, board measure. The products of animals are estimated at \$200 per ton, or ten cents per pound. As butter and cheese make a considerable portion of this class of tonnage, the estimate is not probably out of the way. It is lower than that of the products of animals carried by the canals. Vegetable food, which is chiefly flour, is estimated at \$50 per ton, which is at the rate of \$5 per barrel. The greatest difficulty in arriving at absolute correctness is in reference to manufactures and merchandise. The former is estimated at \$250 per ton, while that transported by the canal is estimated at only \$30 per ton. But the great proportion of manufactures carried by the former is *salt*, which is never transported on railroads. Another important item of manufactures transported on the canals is made up of pig and bar iron. The manufactures transported by railroad, on the other hand, are of entirely a different class of articles, being iron and wood wrought into various forms, fitting them for use, such as utensils and machinery, furniture, leather and domestic woollens and cottons. The term merchandise is applied to a higher grade of manufactures, and embraces all the more valuable kind of goods. The estimate for this class of tonnage is \$500 per ton. A very large proportion of our imports come under this head. A merchant, with the system of classification adopted by the railroad companies, could probably give a very accurate estimate, and, perhaps, point out fallacies in my own.

I am aware that the results deduced from the calculations may seem almost incredible. I believe they are not exaggerated, and am sustained, I think, by reference to the railroads of Massachusetts. These transported, in 1860, 4,094,369 tons. At the value estimated for the tonnage of the New York rail-

roads, that of Massachusetts would equal \$667,383,147. If we take off one quarter of this tonnage as duplications being reported by more than one road, we shall reach 3,079,027 as the absolute tonnage of the railroads of the State, having a value of \$500,524,201. The products of the State for the same year, entering into consumption, were fully up to \$300,000,000. In 1855, according to an accurate census, they were probably \$200,000,000. If we estimate the raw material used, almost the whole of which is imported, the aggregate value of the tonnage would be \$450,000,000. The tonnage passing over the roads of the State, from other States, probably exceeded in value \$50,000,000, making the aggregate of \$5,000,000.

In estimating the value of the tonnage of the railroads of New York, we must make certain deductions for duplications, though probably not so great a percentage as for the railroads of Massachusetts. Of the total tonnage of the former 2,107,737 were carried by the Erie and Central Railroads. The roads tributary to these are the Buffalo and State line, the Buffalo, New York and Erie, and the Watertown and Rome, the aggregate tonnage of which was 678,767 tons. If we deduct 25 per cent for duplication from the total tonnage of the State there will be left 3,556,330 tons having a valuation of \$598,681,798. With the deductions the absolute tonnage of the railroads of the two States \$6,626,357, having an aggregate value of \$1,080,205,991. Adding this tonnage and value to the freight transported by the public works of the two States will be 11,276,571 tons, having a total value of \$1,250,055,179.

The total length of the railroads of the two States was 3,886 miles, 1,317 being in the former and 2,569 in the latter. The freight carried per mile of road was, consequently, 1,700 tons. There are in the United States 33,000 miles of railroad. If we assume a tonnage for the whole equal to one-half that for the railroads of New York and Massachusetts, or 850 tons per mile of road, the total tonnage will be 28,050,000 tons, having a value of \$4,542,150,000.

If to these aggregates we add the tonnage of the canals of the country, estimating the same and their value at twice those for the New York Canals, the aggregates for all the Canals will be 9,300,428 tons, having a value of 341,688,396. Adding these amounts to the railroads of the country, the former will be swelled to 37,350,428 tons, having a value of they are do not include the coast-wise trade \$4,883,848,396. These aggregates, vast as the country, or that of its navigable lakes and rivers. There is no doubt that the tonnage greatly under estimated, whatever may be thought of its value. The average tonnage per mile of the railroads of the Eastern States, embracing coal roads, is fully 2,000 tons per mile of road. The tonnage of the Western roads is fully 1,000 tons per mile, as is proved by the following statement of the length and tonnage of several roads:

	L'gth, miles.	Tons Trans- ported.
Cleveland, Columbus & Cin., ti...	141	295,831
Little Miami.....	120	343,965
Cleveland and Toledo.....	147	250,483
Michigan Central.....	282	378,570
Michigan Southern.....	525	398,670
Illin's Central.....	700	496,390
Chi. & Burlington and Quincy.....	310	538,670
Chicago and Rock Island.....	228	301,668
Galena and Chicago.....	259	381,188
Total	2,712	3,886,393

Average per mile, 1,250.

As conditions precedent to an accurate estimate of the value of the internal commerce of a country, we must first know the amount and value of the products, and the degree to which subdivision of labor is carried. But no adequate census of the country has been taken with a view of ascertaining these facts. We have had only one thoroughly complete census—that of the State of Massachusetts, taken in 1855. The total value of all the products was \$295,820,825. The rate of production was equal to \$200 per head. One half this rate for the whole country would equal \$4,000,000,000. Assuming that one half the values produced went into channels of commerce, the return values being equal to those outgoing in any direction, and we should have a result corresponding very nearly with that already given.

The next step, assuming the correctness of the calculations in reference to the commerce of the railroads and canals of the country, is to determine the value of the coast-wise trade, and that of the natural water courses—the lakes and rivers. But here we are thrown almost entirely upon conjecture. Take, for example, the value of merchandise brought to and carried from this city on the Sound boats, of which, in connection with railroads, there are three first class lines. The steamers of these arrive and depart daily, almost always heavily laden. We have not here the elements for making a calculation approximately correct. Such is the case with the whole coast-wise trade. We are no better off in reference to the river trade. With regard to the lake-trade, a great many reports have been got up, but the calculations of many of them seem to be extravagant and fallacious. That of Mr. I. D. Andrews is the most complete work of the kind ever executed, as few are willing to bring to such an undertaking an equal amount of patient industry, and few are so well acquainted with the subject discussed. But his report was prepared ten years ago, since which the internal commerce of the country has doubled in value. In 1855, an elaborate report was submitted to Congress in reference to this trade, which gave the following aggregate, for the several lake ports:

Districts.	Ton'ge enter'd and cleared.	Value of Imp'ts & Exp'ts.
Cuyahoga.....	1,782,493	\$162,185,540
Buffalo Creek....	3,330,232	303,023,000
Sandusky.....	—	59,966,000
Maumee.....	1,034,644	94,107,000
Chicago.....	2,632,000	233,878,000
Detroit.....	1,538,000	140,000,000
Milwaukee.....	—	35,000,000
Oswego.....	1,607,000	146,235,000
Sackett's Harbor, Cape Vincent, Oswegatchie, Genesee, Niagara, Presque Isle, Michilimackinac, }	 —	42,226,000
} Omitted.		—
Exports and Imports.....	—	\$1,216,620,640
Total value of Lake Commerce excluding Presque Isle and Michilimackinac.....	—	\$608,310,320

Tonnage of the Lakes for 1854 and 1855 including the Steam Tonnage for 1855.

	1854	1855	Steam Ton'ge.
Tonnage			
Sackett's Harbor...	7,670	6,227	1,944
Oswego.....	24,365	42,460	5,199
Genesee.....	—	233	128
Niagara.....	868	403	128
Oswegatchie.....	3,744	4,485	3,042
Buffalo Creek.....	82,678	76,952	38,262
Cape Vincent.....	4,886	6,609	1,143
Presque Isle.....	8,210	9,269	4,720

Cuyahoga.....	45,483	51,078	15,012
Sandusky.....	6,084	8,051	306
Miami.....	5,479	3,762	115
Detroit.....	52,363	65,058	32,180
Mackinaw.....	3,393	4,431	2,397
Milwaukee.....	14,117	15,673	288
Chicago.....	31,041	50,972	3,207

Total tonnage... 291,231 345,729 108,243

Increase of Lake tonnage (steam and sail) from June 30, 1854 to June 30, 1855, a fraction over 18.8 per cent.

Ratio of steam to sail tonnage for 1855, a small fraction less than $\frac{1}{4}$.

With regard to the commerce of rivers we have nothing better than the estimates and statements of the Boards of Trade, and of Prices Current of a few cities lying upon them. According to these the value of imports into Cincinnati for 1860 was \$107,647,216; exports \$119,637,188. Those of St. Louis were still greater. Of smaller ports we have no accounts whatever, and this branch of the subject is referred to, rather as an important field of inquiry, which should immediately engage the attention of the general government, than with any purpose of giving estimates of such commerce even approximately correct.

Assuming the correctness of the estimates given, a most important lesson is taught as to the relative value of the crops and wealth of different portions of the country. I do not desire to introduce political or social questions, but there is no doubt that the value of the tonnage of the public works of New York is four times greater than that of a full cotton crop. Very exaggerated notions have been entertained as to the value of this crop compared with that of the products of the whole country. It is doubtful whether it equals in value one-twenty-fifth of the whole. The strength displayed by the North in the present contest fully confirms this estimate. With one half, in area of the United States actually isolated from it, the strength of the Government does not seem to be weakened either in men or money. There has been a great amount of individual loss and suffering, but the North carries the load imposed upon it without feeling the burden, and has for the first time in its history come to something like a consciousness of its real strength. The concurrence of a dearth in Europe, with abundant crops in the Northern States undoubtedly proved our salvation; but all this would not have availed us, had we not accumulated the means for their transportation. If the North, twenty years ago, had foreseen the rebellion, and commenced what would have been deemed adequate preparation for the crisis, it must have succumbed, as such preparations would have checked the progress of its public works and wealth to such a degree as to have left it incapable of putting forth the strength necessary to crush a gigantic insurrection. If it had happened that the Erie Canal had had four feet of water instead of seven, the demand for breadstuffs could not have been supplied. The balance of trade would probably have been so largely against us as to have forced the banks to suspend and involved people and Government in a common ruin. But this great work so silent in its operations that hardly any one is conscious of its existence, has safely carried us through a storm which all intelligent foreigners believed would soon make financial, and then political shipwrecks of our country. Under incredible difficulties, the strength it has displayed is the most marvellous thing in this land of marvels.

Since the construction of the Erie Canal and our system of railroads, every year has

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.	
Atlantic and Great Western.....	N.Y. & Pa.		48	\$	\$	\$	\$	\$								
Baltimore and Ohio.....	Md.		380	13,111,800	10,781,833	566,070	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5				
do do										"	2,500,000	6		1885		
do do										"	700,000	6		1870		
do do										"	1,125,500	6		1875		
do Washington Branch.....	Md.		30	1,650,000						"	1,000,000	6		1867		
Bellefontaine and Indiana.....	Ohio & Ind.		118	1,859,813	1,256,750	139,129	314,000	8,795	Dec. 1860.	1st Mortgage.....	791,000	7		1866		
do do										2d	160,000	7		1870		
Buffalo and State Line.....	N.Y. & Pa.	121	68	1,950,950	1,049,000	27,543	911,019	498,047	June 30, 1860							
do do																
Burlington and Missouri.....	Mo.		75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000					
Camden and Amboy.....	N. J.		96	3, 98,400	8,880,000		1,997,065	733,950	Dec. 31, 1860	1st Mortgage.....	3, 7, 0, 0	6		1864		
Central Ohio.....	Ohio.		137	In hands of Receiver.	3,673,400	1,126,458	597,633	71,356	Aug. 1, 1859	1st	800,000	7		1864		
do do										2d	80,000	7		1865		
do do										3d	950,000	7		1865		
do do										4th	1,367,000	7		1866		
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7		1865 & 1870		
do do										2d	600,000	7		1875		
Chicago, Alton and St. Louis.....	Ills.		222	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7				
do do										2d	1,535,000	7				
Chicago and Milwaukee.....	Wis.			No report received.						3d	1,000,000	10				
do do										1st Mortgage.....	400,000					
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		194	2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F.	1,250,000	7	41	Feb. & Aug.		
do do										Gen'l 1st Mortgage.	3,600,000	7	41	Feb. & Aug.		
do do										2d	2,000,000	6	11	May 1.		
Chicago and Rock Island.....	Ills.		53	5,603,000	1,397,000		1,164,018	455,963	June 10, 1861	1st Mortgage.....	2,000,000	7		1870		
Chicago, Burlington and Quincy.....	"	61	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	99	1883		
do do										" 2d " S. F.	813,000	8		1890		
do do										1st Mor. Chi. & Aur.	390,000	7		1867		
do do										2d " " "	303,490	7		1869		
do do										1st "Cent. Mil. Tract	392,000	7		1864		
do do										2d " " "	245,000	8		1868		
Chicago, Iowa and Nebraska.....			82	No report												
Cincinnati and Chicago Air Line.....	Ind.															
Cincinnati, Hamilton and Dayton.....	Ohio.		60	2,155,800	1,356,000		644,228	174,535	Mar. 31, 1861	1st Mortgage.....	441,000			1867		
do do										2d	950,000	7		1860		
Cincinnati, Wilmington & Zanesville ..	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000					
do do										2d	532,000					
do do										3d	104,500					
Cleveland and Mahoning	Ohio.		68	1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,500					
do do										1st Mortgage.....	850,000					
do do										2d	400,000	7				
do do										3d	344,000	8				
Cleveland and Pittsburgh.....	Ohio & Pa.	18	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	13	1860		
do do										2d " M. L. or 1st Ex.	1,185,000	7		1873		
do do										3d 2d Ex.....	1,165,000	7		1865		
do do										4th 3d Ex.....	1,154,000	7				
Cleveland and Toledo.....	Ohio.	46	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	359,000			1867		
do do										1st " " 2d Div.	263,000	7		1872		
do do										2d " " "	263,000	7		1862		
do do										1st " Tol. Nor. & Cleve	521,000	7		1863		
do do										2d " " "	293,300	7		1865		
do do										Junction Income.....	44,500	7		1862		
do do										C. & T. Income.....	300,000	7		1864		
Cleveland, Columbus and Cincinnati.	Ohio.	100	135	4,746,100	510,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000			1864 & 1890		
Cleveland, Painesville and Ashtabula..	"	98		3,000,000	1,602,000	none	1,063,403	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7		1861		
do do										2d	303,000	7		1862		
Columbus and Xenia.....	Ohio.		54	1,490,000	290,700	50,500	See L. Miami.			Dividend.....	272,700			1860 to 1866		
Columbus, Piqua and Indiana.....	"		103	In hands of Receiver.	2,512,000		292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"		142	2,176,666						2d	2,212,000	8				
Dayton and Western.....	Ohio.		38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000			1875		
Detroit and Milwaukee.....	Mich.		186	No report						1st Mortgage.....	2,500,000	7		1866		
do do										2d	1,000,000	8				
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.		111	No report												
Dubuque, Marion and Western.....	"		51	No report												
Eaton and Hamilton.....	Ohio.		36	469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734					
Evansville and Crawfordsville.....	Ind.		132	986,061	1,219,100	249,463	124,140									
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.												
Galena and Chicago Union.....	Ills.	69	121	6,028,300	3,594,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000			1862 & 1863		
do do										2d	1,320,000		100	May 1, 1875		
Great Western	Ills.		175	1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10				
do do										1st " " E. D.	1,350,000	7				
Green Bay, Milwaukee and Chicago...	Wis.		54	400,000	No report											
Greenville and Miami.....	Ohio.		32	300,000	473,000	75,000	63,141	13,573	Sept. 1, 1860.	Land Mortgage...	5,000,000					
Hannibal and St. Joseph.....	Mo.		206	1,041,086	10,554,000	220,306	996,907	519,933		Mortgage Conv.....	1,354,000					
do do										1st Mortgage.....	927,000	6		1873		
Hartford and New Haven.....	Conn.		62	2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	4,000,000	7	102	1869 & 1870		
Hudson River.....	N. Y.	35	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	2d	2,000,000	7		1870		
do do										3d	1,840,000	7		1875		
Illinois Central.....	Ills.	65	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000			1868		
do do										Construction.....	12,885,400	7	93	1875		
do do										"	4,115,000	6		1875		
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	Debentures.....	42,740					
do do										1st Mortgage.....	60,000	7				
do do										2d	578,000	10				
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,284	140,629	448,858	230,834		Income.....	38,700	10				
do do										1st Mortgage.....	500,000	7		1866		
do do										2d	400,000	7				
Indianapolis, Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort...	200,000	7				
do do										1st Mortgage.....	649,984					
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d	314,000					
Iron.....	Ohio.		13	118,865	50,000		No report									

RAILROAD SHARE AND BOND LIST,
CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.		86½	\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jedersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st	249,000	7		1861	
do										2d	392,000	7		1873	
Kentucky Central (Covington and Lexington).....	Ky.		99	Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st	260,000	7			
do										2d " Conv	1,000,000	7			
do										3d	600,000	7			
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiv. er.						1st Mortgage E. D.	900,000				
do										2d " E. D.	1,000,000		12		
do										1st Land Grant W D	4,000,000				
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report			1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.		29	514,433	130,000		108,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883	
Little Miami.....	Ohio.		61				1,330,030	529,981	Jan. 1, 1862	City Loan.....	174,000				
Louisville and Frankfort.....	Ky.		65	1,169.59	384,519		245,910	98,679	June 30, 1861	1st Mortgage.....	248,000				
do										1st Mortgage.....	2,400,000	7			
Louisville and Nashville.....	Ky.		268	5,631.469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.		288	2,800,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.		87	1,618,050	1,245,300	87,960	230,563	99,080	Dec. 31, 1860.	1st Mortgage	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.		208	8,561,213	190,408	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868	
do										2d	2,000,000	7			
do										3d	1,500,000	7			
do										Sterling Income...	333,000	4			
do										Domestic	928,617	7			
Michigan Central.....	Mich.		55½	6,057,764	7,968,489	125,000	2,126,699	910,169	May 31, 1861	1st Mortgage Sterling	467,483	6		1872	
do										1st " Conv.	500,000	8	100	1869	
do										1st " unconv.	250,000	8		1860	
do										1st " Dollar Conv.	2,598,000	8		1869	
do										1st " S. F. Conv.	4,153,000	8	93	1882	
Michigan South'n & North'n Indiana	Mich &		24½	9,018,200	9,714,704	437,886	2,075,459	1,030,829	Mar. 31, 1861.	Mort. Mich. S.	991,000	8	90	1860	
do										" Nor. Ind.	985,000	8	88½	1861	
do										" Goshen Line.	1,168,000	8	82½	1868	
do										S. F Toledo	2,850,000	8	85	1885	
do										2d Mortgage	2,465,000	7	73	1877	
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8			
do										2d	200,000	7			
Milwaukee and Horicon.....	Wis.		42	1,101,200						1st Mortgage.....	420,000	8			
do										2d	600,000	7			
Milwaukee and Prairie du Chien.....	Wis.		27½	4,944,000	2,556,000		683,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,550,000	8		1891	
Milwaukee and Western.....	Wis.		71	No report											
Mississippi and Missouri.....	Iowa,		55	No report						1st Mortgage Conv.	1,000,000	7			
do										2d " S. F.	400,000	7			
do										Oskaloosa Div.	1,425,000	8			
do										Land Grant.....	700,000	7			
New Jersey.....	N. J.		33	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000				
New Jersey Central.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.						
New York and Erie Pref.....	N. Y.		61½	Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860	1st Mortgage.....	3,000,000		100		
do			37½							2d	4,000,000				
do										3d	6,000,000		96		
do										4th	4,900,000		86½		
do										5th	1,792,000		76		
New York and Harlem Pref	Conn.		31½	5,717,190	6,055,752		1,142,851	433,716	Sept. 30, 1860.	1st Mortgage.....	2,950,000	7	101	1873	
do common			13							2d	1,000,000	7		1864	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7		Dec 1, 1866	
do											978,000	6		Oct. 1, 1875	
New York Central.....	N. Y.		83½	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert to St. H.	7,925,000	6	98	May 1, 1863	
do										Mortgage.....	3,000,000	7	104½	June 15, 1864	
Northern Central.....	Md.		138	2,260,000	5,890,300	557,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,085,500	6		1885	
North Missouri.....	Mo.			2,413,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,500,000				
Ohio and Mississippi, Eastern Div....	Ohio & Ind		192	Leased	9,880,000	2,330,030	898,817	153,669	May 1, 1861	1st Mortgage.....	2,191,500				
do										3d	316,995				
do										Construction.....	4,637,920				
do										Income.....	3,591,183				
Ohio and Mississippi, Western Div....	Ills.		148		3,292,403		No report								
Pacific.....	Mo.			3,199,662	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000	6	38		
do										" S. W.	2,800,000	6			
Pennsylvania.....	Pa.		359	13,261,960	17,163,947	307,489	7,300,000	3,646,938	Dec. 31, 1861.	Construction.....	4,500,000	6			
do										1st Mortgage Conv.	4,900,000	6		1888	
do										2d	2,319,000	6		1875	
do										2d " Sterling.	1,957,440	6		1875	
do										State Works.....	7,200,000	5			
Peru and Indianapolis.....	Ind.		74	1,100,000	820,000	80,000	No report								
Philadelphia, Wil. and Baltimore.....	Del.		98	5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage	2,300,000	6		1884	
do										Improvement.....	119,000	6		1863	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		467	Sold for Floating Debt.	10,192,155	1,757,273	2,333,323	761,555	June 30, 1861	1st Mort. O. & P.	1,000,000	7		1865	
do										2d	750,000	7		1866	
do										1st " O. & I.	1,000,000	7		1872	
do										2d	380,000	7		1873	
Pittsburgh and Connellsville.....	Pa.		49	1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000				
Racine and Mississippi.....	Wis.		104	2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.						
do															
Sandusky, Dayton and Cincinnati ..	Ohio.		170	2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856	
do										"	997,000	7		1866	
do										"	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.		125	848,770	1,385,900	132,063	185,974	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886	
St. Louis and Hooking Valley.....	Ohio.		56	40,975	500,000	100,000	110,200	53,100							
Sprangfield Mt. Vernon & Pittsburgh..	Ohio.		50	1,000,000	1,050,000	200,000				1st Mortgage.....	500,000				
do										2d	450,000				
Stuebenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d	900,000	7		1865	
do										1st Mortgage Conv.	1,000,000	7	73	1862	
Terre Haute, Alton and St. Louis....	Ills.		208	No report						2d " Conv.	2,000,000	7		1868 & 1870	
do										1st " Bel. & Ill.	517,000	7		1873	
do										1st Mortgage.....	230,000	7	75½	1866	
Terre Haute and Richmond.....	Ind.		100	1,381,450	230,000	none.	377,062	216,183	Dec. 1, 1861.	1st Mortgage.....	3,400,000	7		Aug. 1, 1885	
Toledo, Wabash and Western.....	Ohio & Ind		3½	2,123,500	5,096,049	52,389	233,546			2d	2,500,000	7	45	Nov. 1, 1878	
do										Mort. Coupons.....	98,049	7		1860 to 1865	

greatly added to the area from which this City draws its trade. The possible extent of this area becomes a question of the utmost importance, in view of the closing of Southern harbors, either by a temporary or permanent blockade—by a stone or a steam fleet. It is a remarkable fact that, however important it may be to keep Southern ports open to preserve capital already invested in them, and for the purpose of maintaining an established route, they might all be closed without reducing, except temporarily, the volume or value of Southern products, especially cotton and sugar. Previous to the rebellion, nearly all the sugar grown in Louisiana went up the Mississippi River. Cotton had begun to move largely in the same direction. New Orleans had almost entirely ceased to be the port of export, either coastwise or foreign, for the grain or food crops of the West. The total exports of these articles from that city the past year was as follows:

Exports to	Flour, bbls.	Pork, casks.	Bacon, bbls.	Lard, bbls.	Beef, bbls.	Corn, sacks.
New York,....	10,862	864	271	9,018	9,878	37,243
Boston,.....	41,524	2,097	91	1,061	1,696	22,410
Philadelphia,....	.....	.....	.....	260	10	.....
Baltimore,.....	.....	.....	.....	.....	.....	.....
Oth. est. p'ts, 247,231	45,522	28,363	7,306	3,019	499,916	.....
Great Britain,....	8,341	89	.....	7,446	5,495	52,448
Cuba,.....	6,478	1,307	1,661	37,380	735	27,065
Oth. for. ports, 74,115	3,120	305	6,461	863	14,288	.....
Total,.....	356,511	53,059	30,693	70,852	21,699	652,370

Of the Breadstuffs exported from New Orleans the past year, only 58,727 barrels of Flour and 112,101 sacks of Corn were sent to the Eastern States and Great Britain, the value of which did not exceed \$576,564. Of Provisions there were exported in the same direction 3,055 barrels of Pork, 362 casks of Bacon, 18,871 barrels of Lard, and 17,082 barrels of Beef, the value of the whole not exceeding \$600,000. In other words, the total exports of Breadstuffs and Provisions, the products of the Mississippi Valley, sent to the Eastern States and Great Britain, the past year, did not exceed \$1,200,000 in value, against a tonnage of the same articles, equaling \$200,000,000 in value coming to the water, over the public works of New York. Already has this city swept clean the northwest. The same law of attraction that had turned to its harbor the food grown in the great valley, was bringing its cotton, and would have soon brought to us a large portion of the crop, had peace and harmony in domestic relations continued. From Cairo cotton can be forwarded to Liverpool as cheaply through New York as through New Orleans. The belt for the production of this staple lies midway between this point and New Orleans, and it can be laid down as cheaply at one place as the other. The same thing may be affirmed of the crop grown in Western Alabama as well as in the States lying upon the Mississippi and its tributaries. The cotton of South Carolina and Georgia can go forward to Liverpool through the interior routes, and by way of New York, at a cost not exceeding one cent per pound that of sending it direct from Savannah and Charleston. These statements could be easily demonstrated by the introduction of a few freight bills of railroad companies and forwarders. By closing the Southern ports we need not fear any harm to commerce, the moment the people there make up their mind to trade.—*New York R.R. Jour.*

—The Cincinnati, Hamilton and Dayton Railroad Company has declared a dividend of 4 per cent, payable May 1, at the Bank of America. The May interest on the second mortgage bonds will also be paid at that bank

LONDON GAS WORKS.

We take from the *Engineer* a description of the London Gas Works.

The metropolis, including a number of its suburbs, is supplied with gas by thirteen companies owing nineteen works, all but two of which are within four miles from Charing cross. The retorts, both single end and double end, are equal to almost exactly 5,000 double retorts, averaging about 19 feet in length, or to 10,000 mouth pieces. It has been estimated that these works carbonize 850,000 tons of coal annually, and from which about 8,000,000,000 (eight thousand million, or, in the ordinary terms of gas measurement, eight million thousand) cubic feet of gas is made. Of this, upwards of one million thousand of feet is lost by leaking from the mains and in other ways, while the rest is sold for about £1,600,000. Other estimates give 1,000,000 tons as the amount of coal carbonized yearly, the sale of gas amounting to £2,000,000, equal to 14s. 6d. for every man, woman, and child in the metropolis.

The first gas company in London, as it was the first in the world for the production of gas commercially, was the "Chartered," originally empowered as "The Gas Light and Coke Company," and which commenced business in 1812. This company has, for many years, carried on three separate works, one in the Horseferry road and Great Peter street, Westminster, one in Goswell street and Brick lane, and a third in the Curtain road. The City of London Gas Light and Coke Company built extensive works, in 1812 also, at the foot of Dorset street, just below the Temple, and upon ground originally occupied by the New River Company. The Phoenix Company was the first to make gas on the south side of the Thames, their first retort house, at Bankside, and now occupied as a boiler shop by Messrs. Rennie, having been built in 1816. The present retort house at Bankside was erected in 1840, and in 1848 the same company, already carrying on a branch works at Greenwich, established a third and extensive station at the south eastern end of Vauxhall bridge, with large gas holders at Kennington oval. The next London gas company was the Imperial, whose operations have always been by far the most extensive of any in the metropolis, if not in the kingdom. The Imperial has three gasworks, the Pancras station, at Battle bridge, near King's cross, the Hackney road works, Great Cambridge street, and a third establishment at Fulham. Then we have the London Gasworks, in Vauxhall, near the bridge, the Ratcliff, near the Wapping end of the Thames Tunnel, the South Metropolitan in the Old Kent road, the Commercial in Stepney, near the Mile End road, the Equitable in Pimlico, a short distance above Vauxhall bridge, the Independent in Albert street, Haggerstone, the Surrey Consumers' in Rotherhithe, near the Thames Tunnel, the Great Central Consumers' at Bow common, and the Western at Kensal green. It will not be necessary for our purpose to give the boundaries of the districts supplied by the various companies. In most cases the position of the works themselves is within the district supplied, although in other instances the whole delivery of gas is at a considerable distance from the works. Thus, the Great Central Consumers' Company works are at Bow common, are not allowed by their Act to supply gas elsewhere than in the City of London, the neighborhood about their own works being lighted by the Commercial Company.

Three gasworks, the Ratcliff, the Surrey

Consumers', and the Greenwich branch of the Phoenix, are on or close to the Thames, below London bridge, and are thus enabled to receive their coal directly from the Newcastle colliers. Five works, the Bankside and Vauxhall stations of the Phoenix Company, the City, the London, and the Equitable, are on the river side, above bridge. Five works, the Commercial, the Independent, the Pancras and Hackney road stations of the Imperial, and the Western, are on the Regent's Canal.

The Fulham station of the Imperial Company is on the Kensington Canal, the South Metropolitan works are on the Grand Surrey Canal, and the Great Central Consumers' is close to the North London Railway, from which branches extend directly into each side of the retort house. Neither of the three stations of the chartered Gas Company are on a line of water or railway communication, the whole of their coal having to be sacked at the nearest wharf, thence carted to the works, where the men carry it in on their backs. The City extension of the North London Railway will run close to the Curtain road works, which will thus receive their coal directly from the railway wagons, the level of the rails being 16 feet above the floor of the retort house.

Illuminating gas is produced by the decomposition of organic substances, of which coal is among the cheapest and most convenient. Under a destructive distillation at a high heat, wood, resins, fats and oils, peat, and many other substances yield lighting gas. In some of the towns in America, as at Wilmington, North Carolina, the whole supply of gas has been made from pine wood, which does not, however, afford a gas of high illuminating power. Works for the production of gas from resins, fats, and oils, were at one time common, but have been generally abandoned on account of the greater cost of the gas produced as compared with that obtained from coal in the ordinary manner. Some interest has been aroused by the gas producing properties of peat, and one or two of the London companies are now experimenting with peat from the estates of the Earl of Caithness in the North of Scotland. Thus far the results have been encouraging, and it may be that peat gas will by and by come into extensive use.

Purified coal gas consist almost entirely of carbon and hydrogen in two different proportions of mixture. Hydrogen, which is the more inflammable constituent, gives but a very feeble light when burnt in the air or in pure oxygen. When two atoms of hydrogen have united themselves to one of carbon, forming carburetted hydrogen or marsh gas (the "fire damp" of the miners), light is afforded, as, in burning, the inflammation of the hydrogen precipitates the carbon atoms, raising them to incandescence, in which state they are highly luminous. When the two atoms of hydrogen take up a second atom of carbon, forming bi-carburetted hydrogen, or olefiant gas, the illuminating power is greatly increased. Purified coal gas is a mixture, in variable proportions, of pure hydrogen and carburetted and bi carburetted hydrogen, the whole having, as in the average of London gas, a specific gravity of about .400 or .412, air being 1.000.

Coal is, practically, a compound of carbon and hydrogen in the solid state. A good gas coal may contain 85 per cent. of carbon, and from 5 to 7 per cent. of hydrogen, the remainder being fixed oxygen, &c., besides mineral matter. The coal once decomposed at a high heat, the hydrogen immediately takes the gaseous state, carrying with it also from twice to three or four times its own weight of

carbon vapor in combination. The remaining carbon, generally from 60 to 70 per cent. of the original weight of the coal, is known as coke, its porous structure being due to the formation of highly expansive gas throughout its whole mass. At a low heat, the chief products of the distillation of gas bearing coal are liquid hydro-carbons, as oil and tar. Paraffine oil is distilled at a moderate heat from the highly hydrogenous Boghead coal, and it is probable that the vast subterranean collections of oil in and near the American coal fields have been formed by the action of internal heat upon the beds of coal themselves. At various places not far from the oil wells, natural gas is obtained in abundance from the ground, the town of Fredonia, in the State of New York, being lighted throughout by natural gas, which is also employed for illuminating one of the lighthouses on the southern shore of Lake Erie. This gas, we may suppose, has been generated at a higher heat from either the coal or coal oil, from near deposits of which the gas is obtained.

We may observe here that the lights given out by torches oil and spirit lamps, and candles, are true gas lights, as much so as that which blazes from the burner of a gas pipe. In burning any inflammable substance, it is gradually decomposed by the heat communicated from the original ignition, and the gaseous products thus formed, and to which the brilliancy of the light is due, are practically identical with coal gas. The superior brilliancy of the latter is due to its being less diffused, and to being burnt at a more rapid rate; at least a dozen sperm candles being required to give as much light as an Argand gas burner burning 5 cubic feet per hour. A gas burner burning but $1\frac{1}{2}$ cubic feet per hour gives a light only equal to that from a single candle, while by doubling the discharge from the burner a light equal to that of from 8 to 16 candles is obtained.

With this hasty glance at the nature and properties of coal gas, we may follow up the details of its production in the great gasworks of the metropolis. At many of these works two qualities of gas are made, ordinary gas and cannel gas, the latter having two-thirds more illuminating power than the former, the usual price of ordinary gas being 4s 6d. per thousand cubic feet, while cannel gas is sold at 6s. The Western Gas Company make only cannel gas. For the ordinary gas the coal used comes from the neighborhood of Newcastle. A good house coal is not, as a rule, the best gas coal, as the latter would be too smoky and "crusty." Hence it is that the coal from the Pelton, Haswell, Lamiton's, Levison's, and Pelaw pits, being especially rich in hydrogen, and therefore preferable for gas making, ranks in price considerably below that of Wallsend. Thus North Pelton gas coal has been quoted lately as low as 12s, and perhaps 14s. is a fair average price for gas coals in the Pool, where the Surrey Consumers' Company unship them at their doors. Cannel gas is either made directly from Lancashire, Scotch, or Welsh cannel coal, or it is made by mixing the gas from Newcastle coal with that made from Boghead coal. The latter now brings 50s a ton, and its price is likely to rise to where gas companies can no longer afford to use it. Some of the Newcastle coals contain a certain proportion of cannel in combination. From the Levison coal, for instance, more or less cannel may be picked out. At present, for making cannel gas up to the parliamentary requirement, the proportion of Boghead to Newcastle coal is about as 3 to 7, 30 per cent. of the whole amount of coal car-

bonized being of the former, and 70 per cent. of the latter variety; the different kinds of coal being carbonized in separate retorts, so set that the gases may meet and intermingle in the "hydraulic main" over the retorts.

Good gas coal is more liable than other coals to spontaneous ignition. The presence of "fire damp" in the mines of richly bituminous coal proves the readiness with which hydrogen separates from solid carbon, and if the coal be reduced to "slack," which is the state in which a great deal of gas coal comes to London, some attention to ventilation is necessary to prevent the accumulation of gas in the vessels and stores in which the coal is kept. Occasionally we hear of a gas explosion, blowing up the decks and "starting" the planking of a collier. If the coal be allowed to get damp, decomposition of both the coal and water goes on, and there is every chance that the former may ignite spontaneously unless thoroughly ventilated. At the different London gasworks, from 20,000 to 100,000 tons of coal are carbonized yearly, and large stocks, often from 5,000 to 20,000 or 30,000 tons of coal are occasionally stored together. Unless care is taken to keep the coal well out of the weather, and to secure good ventilation, both by large openings in the upper part of the walls of the coal sheds, and generally, by air pipes penetrating and ramifying throughout the coal itself, there is more or less danger of fire.

The coal wheeled to the floor of the retort-house, the business of gas making commences. Gas retorts are close vessels, one made almost exclusively of cast iron, but in all the London gasworks they are now almost as exclusively made of fire clay or built up of fire bricks. The old iron retorts were generally 9 ft. or 10 ft. long, with one end cast in, the other being closed by a removable lid or cover. More than nineteen twentieths, however, of all the gas retorts now in use in London are from 18 ft. to 20 ft. long, and provided with lids at both ends. In cross section the retorts are either circular, elliptical, or  shaped, a very large if not the largest proportion of those now used in London being of a circular section. An internal diameter of 15 inches is a common size, the fire clay sides being from 2 inches to 3 inches thick all round. Considerably larger retorts are used however, the Chartered Company having a number of  retorts at their Goswell street works, measuring 26 inches inside. The retorts are always placed horizontally, a number varying from five to fourteen being set together within a sort of oven of fire brick, which is heated throughout, generally by a fire in a single furnace at each end, although occasionally two fires are employed at each end of a set of retorts. Each set, or oven of retorts, is technically called a "bench," and these are placed, side by side, in a low row, the length of which governs the length of the retort house.

At the great Pancras station of the Imperial Company, there are nearly 600 retorts, 20 ft. long, or nearly 1,200 "mouth pieces," the retorts being worked from both ends. These are generally set 10 in a bench, although in some of the benches there are but 6 retorts. At the Hackney road station of the same company there are, we believe, 386 retorts 19 ft. 6 in. long, a large number being set 10 in a bench. At the Fulham station of the same company are 350 long retorts, 240 of which are set 6 in a bench, while 140 more are set 10 in a bench. It is to be borne in mind that 5 is the number now adopted in setting new retorts.

[To be continued.]

MONETARY AND COMMERCIAL.

The main features of the money market chronicled last week are equally true at the present time. The surplus of money is increasing, without any corresponding increase in the demand, from acceptable parties. Rates vary from 8 to 12 per cent. for first-class to good. In reference to the New York money market, the Tribune says: "Money, in the language of the street, is a 'drug' at 5@6 per cent. on first class collaterals. Gilt-edged paper goes at $5\frac{1}{2}$ @7 per cent., and in extreme cases even lower. The deposits with Mr. Cisco for Five per cent. Certificates to-day were \$1,362,000, nearly all from the city banks."

This shows clearly that *money* is fast reaching a plethoric state in the great center, and is but an indication of the general condition of the country.

The supply of and demand for exchange has ruled about equal, and quotations are without change.

	Buying.	Selling.
New York,.....	par	$\frac{1}{4}$ prem.
Boston,.....	par	$\frac{1}{4}$ prem.
Philadelphia,.....	par	$\frac{1}{4}$ prem.
Baltimore,.....	par	$\frac{1}{4}$ prem.
Gold,.....	$1\frac{1}{2}$ prem.	2 prem.

The report of H. I. Jewett, receiver of the Central Ohio Railroad, for February:

RECEIPTS.	
To balance as per last report,.....	\$43,940 93
From passengers,.....	\$13,982 93
From Freight,.....	36,276 32
From Express,.....	2,493 63
From Mileage,.....	1,201 65
From other sources,.....	209 90—54,166 39
Total,.....	\$98,107 25

EARNINGS FOR FEBRUARY.	
From Passengers,.....	\$16,471 51
From Freight,.....	18,673 50
From Express,.....	2,012 29
From Mail,.....	2,114 40—39,271 70

EXPENSES.	
Transportation Department,.....	\$7,369 11
Machinery Department,.....	8,124 66
Fuel Department,.....	4,126 69
Road Department,.....	7,562 41
General Expenses,.....	1,620 89—
Working Expenses,.....	\$23,803 56
Construction,.....	2,071 64

Total Expenses,.....	\$30,875 20
Balance on hand March 1,.....	\$1,556 18

At the election for Directors of the Michigan Southern & Northern Indiana Railroad, held in Toledo on Wednesday, April 23d, the gentlemen comprising the old Board were re-elected, as follows:

E. M. Gilbert, Utica, N. Y.; Henry Keep, New York; Allen Campbell, New York; Albert Havemeyer, New York; Milton Court-right, New York; Hamilton White, Syracuse, N. Y.; Nelson Beardsley, Auburn, N. Y.; William Keep, Lockport, N. Y.; William Williams, Buffalo, N. Y.; Stillman Witt, Cleveland, Ohio; John S. Barry, Constantine, Mich.; Philo Morehouse, Elkhart, Ind.; M. L. Sykes, Chicago, Illinois.

Statement of the earnings of the Erie Railroad for the six months of the present fiscal year:

October,.....	\$722,362
November,.....	734,826
December,.....	708,136
January,.....	695, 67
February,.....	601,030
March,.....	626,615
Total,.....	\$4,100,576
Total in 1896,.....	6,349,050
Total in 1897,.....	5,721,559
Total in 1898,.....	5,151,616
Total in 1899,.....	4,481,343
Total in 1900,.....	5,269,384
Total in 1891,.....	5,619,476
Earnings of first half, ending March 31, 1892,.....	4,109,575

The increase has been at the rate of 47 per cent. The actual increase has been \$1,301, 170. The ratio will not be so great for the last half of the year. The total earnings will probably reach \$7,250,000. Assuming the expenses for the year to be 66 per cent., the net earnings will equal \$2,466,000.

The annexed statement compares the prices of the principal stocks on Saturday last and yesterday in New York:

	Last Saturday.	Yesterday.
New-York Central.....	82½	83
Reading.....	42	43
Erie.....	36½	36½
Erie Preferred.....	61	61½
Hudson River.....	35½	35½
Michigan Central.....	54½	55½
Michigan Southern.....	23	23½
Michigan So. Guaranteed.....	46	44½
Illinois Central Scrip.....	60½	58½
Galena and Chicago.....	67½	67
Cleveland and Toledo.....	42½	41½
Chicago and Rock Island.....	55	55½
Panama.....	124	122½
Pacific Mail.....	104½	105
Delaware and Hudson.....	92	92
Harlem.....	12½	13½
Harlem Preferred.....	30½	30½
Chicago, Burlington and Quincy.....	66½	61½
Virginia Gs.....	56	55½
Tennessee Gs.....	49½	49½
Missouri.....	93½	94½
United States Gs, 1881, coupon.....	93½	94½
United States Gs, 1881, registered.....	87	87½
United States 5s, 1874, coupon.....	99½	100½
United States 7-10 per cents.....	99½	100½

The details of the earnings of the Galena and Chicago Railroad for the week ending April 22, are:

	1861	1862.		1861	1862.
Freight.....	\$14,302 91	\$12,453 19	Dec..	\$2,249 73	
Passengers.....	7,200 00	6,197 93	Dec..	1,002 07	
Mails, &c.....	1,100 00	1,250 00	Inc..	150 00	

Total..... \$23,602 91 \$19,501 11 \$3,101 80

The earnings of the third week of April on the Toledo and Wabash Road, were:

	1861.	1862.
Passengers.....	\$4,473 90	\$3 680 55
Freight.....	14,118 86	15,320 39

Total.. \$18,592 76 \$18,993 14
Increase .. 400 38

The Rock Island Road earned the third week in April,

1861.....	\$19,480
1862.....	19,027

Increase.....\$453

N. W. BALDWIN, MATHEW BAIRD.
M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order—Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive machinery.

—The Galena and Chicago Road earned the
First week in April, 1861..... \$25,369
First week in April, 1862..... 21,845

Decrease..... \$3,524

The week's business is, however, \$3,400 better than the closing week in March.

The *Meadville Republican* says the Superintendent of Construction of the Atlantic and Great Western Railway advertises for 3,000 workmen, to be employed immediately on the line.

ERIE RAILWAY.

Great Broad Gauge, Double Track and Telegraph Route

TO

NEW YORK, BOSTON, AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

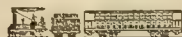
Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

feb 6. CHARLES MINOT, Gen'l Sup't.

Baltimore and Ohio Railroad

RE-OPENED!



This great national thoroughfare is again open for

Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition,

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the recent *Troubles upon the Border* have associated numerous points on the road, between the Ohio River and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$2.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Baltimore.
L. M. COLE, Gen. Ticket Agent, Baltimore.

(CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M.; Chicago at 6:00 A. M., connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in a RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums 49 1 by Franklin Institute.)

OHIO & MISSISSIPPI RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENT, NEN, Cairo, and St. Louis.

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.

RETURNING.—Mail Train Leaves East St. Louis.—(Sundays excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M. arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office No. 5 East Third street; No. 1 Burnet House corner north-west corner Front and Broadway; Spencer House Office; and at the Depot corner of Front and Mill Streets.

G. B. McFILLAN, Gen'l Superintendent.
If Omnibuses call for Passengers,
Novemb 11th, 1861.

1861. 1861

FAST TIME.

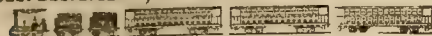
LITTLE MIAMI

(AND)

COLUMBUS AND XENIA

AND

CINCINNATI, HAMILTON & DAYTON



RAILROADS.

On and after SUNDAY, Nov. 10. 1861, Trains depart as follows:

7:30 A. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Baton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation—From Little Miami Depot.

3:30 P. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Richmond, Indianapolis and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express—From Cincinnati, Hamilton and Dayton Depot—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,
General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet Walnut & Vine
CINCINNATI O

W. MORRILL

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of

O. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or.

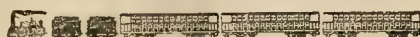
Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

1862. 1862.
Pennsylvania Central R. R.
285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
(with close connections from Western Cities,
ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
ONE TRAIN RUNS DAILY (430 MILES,
VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.
ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, and to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "PA. PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
D. A. STEWART, Freight Agent, Pittsburgh.
CLARKE & CO., Transfer Agents, Pittsburgh.
R. C. MELDRUM & CO., Madison, Indiana.
J. E. MOORE, Louisville, Ky.
W. W. AIKMAN & CO., Evansville, Ind.
R. F. SASS, St. Louis, Missouri.
CLARKE & CO., Chicago, Illinois.
W. H. & E. L. LANGLEY, Gallipolis, Ohio.
G. B. NEAL, Parkersburg, Virginia.
HALL & CO., Marietta, Ohio.
H. S. PIERCE & CO., Zanesville, Ohio.
McDOWELL & McCORM, Portsmouth, Ohio.
R. MCNEELY, Maysville, Ky.
J. P. JOHNSTON, Ripley, Ohio.
JOHN TODD, Covington, Ky.
G. L. HEATON, Cleveland, Ohio.
R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
L. L. HOUSTON, Gen'l Ticket Agent, Philadelphia.
H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

BUSH & LOBDELL.
Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,
MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, MAY 8, 1862.

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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	10.10 A. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.10 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.10 A. M.
Marletta & Cincinnati—		
Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.
Ohio & Mississippi—		
Mail.....	5.05 A. M.	10.05 P. M.
Seaside Accommodation.....	3.00 P. M.	8.45 A. M.
Express.....	5.00 P. M.	6.53 A. M.
Indianapolis & Cincinnati—		
Mail.....	5.05 A. M.	11.10 A. M.
Chicago Express.....	3.20 P. M.	11.50 P. M.
Dayton & Michigan—		
Toledo, Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	2.00 P. M.	10.10 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	10.10 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.
Kentucky Central— (City time.)		
First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marletta & Cincinnati, and Cincinnati, Wilmington & Zanesville Routes, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Routes, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

STATISTICS OF BUILDING IN OHIO.

Among the curious and instructive facts, presented by the Commissioner of Statistics in his annual report, is that of new structures or buildings. We are not aware that this has been reported in any other State or country. Even the decennial census of the United States does not report it; and the European statistics only furnish it in the general censuses taken at long periods. In Ohio, the means of ascertaining new structures accurately is found in the records of the county auditors, and may be accurately determined. The proportion between buildings of all kinds and the population is generally a fixed ratio, and thus the advance of population may be known, independently of the census, and if both classes of statistics are accurately taken, they should agree together. The Commissioner of Statistics (Mr. Mansfield) says:

"The new structures and value for the last four years (*vide* Table for 1860) have been as follows, to-wit:

In 1858.....	10,458	\$5,012,054
1859.....	7,612	4,972,645
1860.....	8,100	3,685,513
1861.....	9,831	4,463,042
Average.....	9,060	\$4,000,000

Rather more than two-thirds of the whole number are dwelling-houses and stores. In the whole four years, above stated, there have been erected *twenty-five thousand dwelling houses and stores*. At the same rate there would be an increase of 62,000 in ten years. At the density of habitation in this State, which is very nearly 6 to 1, this indicates an increase of 372,000 persons, which corresponds most remarkably with the actual increase, which is 360,000 by the Census."

This shows that both classes of statistics were pretty accurately taken; and it also shows very nearly what the increase of the State is annually, at the present time. The increase is not likely to be more rapid; for Ohio has got to be pretty well filled up, as compared with the States west of it. It will grow, but not so rapidly as in former years.

The following table will show the increase of buildings in those counties which have increased the most,—chiefly those in which the large towns are situated, to-wit:

Counties.	1858.	1859.	1860.	1861.	Aggreg.
Hamilton,	684	683	749	1,163	3,279
Cuyahoga,	560	333	185	273	1,351
Butler,	208	—	246	309	—
Montgomery,	321	263	236	275	1,095
Franklin,	272	205	220	206	902
Lucas,	195	219	102	156	672
Seneca,	192	193	165	211	761
Lorain,	270	135	145	212	762
Sandusky,	140	256	108	152	656
Greene,	162	170	192	187	731
Meigs,	194	129	135	154	612

This shows great steadiness of increase in these counties, and proves that the growth of the State is not sudden or speculative; but is entirely a natural and healthy growth, which is not likely to be interrupted. In the above four years, Hamilton (Cincinnati) seems to

have added about 20,000 to its people; Cuyahoga (Cleveland), 8,000; Montgomery (Dayton), 7,000; and Franklin (Columbus), 5,000; and Greene (Xenia), 4,000. The two counties of Seneca and Lorain are chiefly agricultural counties, but have been growing very rapidly. The growth of buildings in Cincinnati may be compared with some former statistics. In 1826 (November and December), the census of Cincinnati was taken by Messrs. B. Drake and E. D. Mansfield, and published in what was called "Cincinnati in 1826." The buildings for Cincinnati, in 1826, were as follows: Stone, 18; brick, 936; wood, 1,541—total, 2,495. Population, 16,230. Ratio, 7 to 1.

An immense change has taken place in the character of the buildings. Then far the largest portion were wooden. Now they are almost entirely brick and stone. The 18 stone buildings then in the town were built chiefly of the coarse limestone of the country. Now, there are hundreds of beautiful buildings of the fine freestone, called the "Waverly." The same transformation in character has taken place throughout the State. The old log cabins and the wooden frames have given place to solid brick houses, built in plain but quite tolerable architecture, and representing in no doubtful way, the solid independence of their occupants.

In 1850, Mr. Cist, in "Cincinnati in 1851," gave the number of buildings in Cincinnati at 16,286, which indicated a little more than 7 to 1 of inhabitants. The growth of buildings in the city were as follows: Up to 1819, 1,890; from 1819 to 1826, 605; from 1826 to 1828, 496; from 1828 to 1850, 13,295.

In thirty one years, there were built about 14,500 buildings, or, not far from an average of 500 a year. Since 1850, the average has been greater, although probably in no one year so many as in 1848. More than 1,100 were built in 1860, and probably when the war ends, the growth of Cincinnati will be greater than ever.

TERRE HAUTE, ALTON & St. Louis R. R.—

The sale, made under decree of the United States Court of this road to the Committee purchasing on account of the assenting stock and bondholders, has been confirmed by the Court. A new Company will be now formed; the second overdue coupons on the first mortgage bonds will be paid; and the balance of the overdue coupons on all the issues funded, and new securities issued in pursuance of the agreement of all parties in interest. This will give to the holders as follows;

About \$6,000 new first mortgage bonds for \$5,000 of the old issue and overdue interest; about \$8,000 new second mortgage bonds for \$5,000 of the old issue and interest; about \$1,400 Preferred stock for \$1,000 of the old third mortgage bonds, and 50 per cent of new stock to old stockholders.

The new company enters upon its existence under much more favorable auspices than

the old one. It has a completed road, with road bed and track in good condition, and a business already established. It should succeed admirably.

CLEVELAND, PAINESVILLE & ASHTABULA RAILROAD.

The annual report of this company, for the year 1861, shows the following statement of the capital stock and debts of the company:

Capital, ...	\$3,000,000
Funded debt, as per last report, ...	1,602,000
Total amount of funded debt now, ...	1,353,000
Floating debt, ...	None.
Cost of road and equipment, ...	3,980,531

The whole length of the road is 95½ miles, in addition to which there are 30 miles of double track and sidings. The gauge of the road is 4 feet 19 inches, and it is laid with rail weighing 57 pounds to the yard. The cost of the road has been as follows:

Road-bed and superstructure, including iron, ...	\$2,267,537 26
Bridges and embankment, ...	701,300 00
Shops, buildings and stations, ...	258,472 00
Land, land damages and fences, ..	203,860 61
Locomotives and show-ploughs, ...	210,000 00
Passenger and baggage cars, ...	66,000 00
Freight and other cars, ...	279,867 78

Total cost of road and equipment, \$3,986,537 65

Which is equivalent to \$41,743 per mile of road. The company have 3 engine houses and machine shops, 30 engines, 25 first-class passenger cars, 8 baggage and express cars and 450 freight cars.

The business of the road for the past year has been as follows:

EARNINGS.

From passengers, ...	\$106,596 24
From freight, ...	669,324 88
From mail, ...	21,600 00
From other sources, ...	22,848 81

Total earnings, ...

EXPENSES.

Maintaining road and real estate, ...	\$144,343 42
Repairs of machinery, ...	82,120 13
Operating road, ...	230,968 70

Total transportation expenses, \$457,432 25

For interest, ...

Total, ...

Total amount of surplus fund, ...

The earnings per mile of road will thus be seen to have been \$11,731. This is much above the average earnings of the roads in the United States. The operating expenses of the road appear to have been but 40¾ per cent. of the gross earnings, which shows very favorably as compared with the average, both as to the character of the business and the economy of working. Standing as this road does, a short link in the great chain of railroads from New York to the great Northwest, without any direct competition on its own line, it could not fail to make large earnings at a comparatively low rate of expenses. Yet the very low rate at which it is operated is

undoubtedly owing in a great measure to the intelligent and economical character of its management.

This road has set the remarkably good example of building the most substantial stone bridges, covered with great depth of earth, at every point where such a structure is possible. It has yet to substitute good iron bridges for wooden structures at points where stone culverts were impracticable. Another feature worthy of note in the management of this road is the remarkably efficient manner in which the track and ballasting has been kept up. It was first put in good order and then sustained rigorously up to the standard. We doubt not, the experience of the whole country will justify the assertion that this is the most economical method of working a railroad.

The details of the operation of the road during the past year show the mileage of passenger trains to have been 206,745 miles, and of freight trains 204,627 miles, within a small fraction of an equal amount. The total number of passengers of all classes carried was 270,607, with a mileage of 18,174,274 miles traveled. The total number of tons of freight carried was 303,609, with a mileage of 27,104,689 miles traveled,—showing that the freight carried was almost exclusively *through business*. The average speed adopted upon all passenger trains, including stops, was 28 miles per hour. The rate of speed, when in motion, 35 miles per hour. The average speed of express trains in motion was 36 miles, and, including stops, was 32 miles per hour. The average rate of speed of freight trains, including stops, was 10½ miles, and, in motion, 15 miles per hour. The average weight of passenger trains, not including passengers, was: 90 tons; that of freight trains, not including freight, was 225 tons.

The following is the classification of freight carried over the road:

	Tons.
Products of the forest, ...	4,756
of animals, ...	117,760
of vegetable food, ...	36,562
Other agricultural products, ...	20,585
Manufactures, ...	16,695
Merchandise, ...	88,421
Other articles, ...	18,830

Total, ...

The rates of fare charged first class through passengers was 2½ cents per mile; first-class way passengers, 2 cents; and emigrant passengers, 1 cent per mile.

During the year, the road declared two dividends; in January, 1861, a cash dividend of 5 per cent., and stock dividend of 4 per cent.; and in July, a cash dividend of 5 per cent. on the capital of \$300,000.

The officers of the company are A. Stone, jr., President; George B. Ely, Treasurer and Secretary; Henry Nottingham, Superintendent, Cleveland, Ohio. Directors—A. Stone, jr., S. Witt, William Case, T. M. Kelley, H. B. Paine, William Collins, Cleveland, Ohio;

Henry E. Parsons, Ashtabula, Ohio; C. C. Dennis, Auburn, N. Y.; Hamilton White, Syracuse, N. Y.; James Miles, Girard, Pa.; J. B. Johnson, Erie, Pa.; T. J. Randall, Philadelphia, Pa.; G. M. Gilbert, Utica, N. Y. The office of the company is at Cleveland, Ohio.

CINCINNATI, HAMILTON & DAYTON RAILROAD COMPANY.

ANNUAL MEETING.

The annual meeting of the stockholders of the Cincinnati, Hamilton & Dayton Railroad Company was held at the office of the company in this city, on Tuesday, when the following reports were read and accepted:

DIRECTORS' REPORT.

CIN., HAM. & DAYTON R. R. Co., }
Cincinnati, May 6, 1862. }

To the Stockholders:

GENTLEMEN: The Board of Directors, in pursuance with the requisition of the By-laws, submit to you the reports of their Superintendent and Secretary, exhibiting the earnings, expenses and condition of the road the past year:

The gross receipts for the year ending March 31st, 1862, after division with L. M. & C. & X. R. R., have been, ...

And the expenses of transportation, ...

Leaving an interest on Bonds, Insurance and Taxes, ...

From this balance, after payment of interest, insurance and taxes, two dividends have been paid to the stockholders, one for three and a half, and one four per cent., with a surplus for the year of \$59,116 51.

The sinking fund is fully up to the requirements of the resolution passed by the stockholders in the year 1855.

The comparative earnings and expenses of the past two years are as follows:

Earnings for the year ending March 31, '62, after division, ...

Earnings for the year ending March 31, '61, after division, ...

Showing an increase of, ...

Expenses of the year ending March 31, 1861, including interest on bonds, taxes, and insurance, ...

Expenses for the year ending March 31, 1862, including interest on bonds, taxes, and insurance, ...

Showing a decrease of expenses, ...

Net increase, ...

Number of passengers carried during the year, ...

Number of tons of freight carried during the year, ...

The track and equipments have been kept in good repair.

Ten passenger, four baggage, and forty new freight cars have been built in our shops the past year, at a cost of \$42,279 65. There have also been erected two warehouses—one at Middletown Station, 30 by 100 feet, designed for the reception of grain, flour, etc.; and the other at Miamisburg Station, 30 by 85 feet, for tobacco. In Cincinnati, a car-house, 22

feet by 165 feet, has been erected. The cost of these improvements and new cars has been charged to the expenses of transportation.

The road has been operated with its usual regularity, and freedom from accidents to persons and property. No passenger has been injured on the trains during the year. Most of those now connected with the business management and running of the road have been in the employment of the company from the time the road was put in operation, in the year 1851; and it is due to them to say, they have faithfully performed their several duties.

The contract for a division of business between the Little Miami, Columbus & Xenia, Dayton, Xenia & Belfre and this company, continues to work satisfactorily and advantageously to the public, as well as to the parties more directly interested.

SECRETARY'S REPORT.

CIN., HAM. & DAYTON R. R. OFFICE, }
Cincinnati, April 25, 1862. }

Income.

From passengers, ...	\$272,117 30
" freights, ...	298,289 69
" mails and express, ...	36,854 51
" rents of track and machinery, ...	30,914 11
" rents of real estate, ...	2,063 75
" interest, ...	5,966 21
	\$646,205 57

Expenses.

Transportation expenses, ...	\$319,490 99
Interest on bonds, ...	95,030 84
Taxes and insurance, ...	13,706 40
Balance profit-and-loss account, ...	175 83

Total, ...

Net income for the year, ...	\$220,801 51
Surplus, March 31st, 1862, ...	36,041 23

Total, ...

Two dividends have been declared as follows:

Dividend No. 13, October, 1861, 3½ per cent., ...	\$75,453 00
Dividend No. 14, April, 1862, 4 per cent., ...	86,232 00

Total, ...

Leaving a surplus, March 31st, 1862, of, ...	95,157 74
--	-----------

The gross earnings for the last ten years, ending March 31st, have been as follows:

1853, ...	\$321,793 17	1858, ...	\$487,421 27
1854, ...	463,021 55	1859, ...	489,437 92
1855, ...	483,620 48	1860, ...	561,681 52
1856, ...	471,885 70	1861, ...	615,071 57
1857, ...	518,333 95	1862, ...	646,205 57

CINCINNATI, May 6, 1862

To the Stockholders of the C. H. & D. R. R.

Your Committee appointed at your last annual meeting, in performance of the duty assigned them, ask leave to make the following report:

During the past year we have examined the books and accounts of the Company as often as we deemed necessary, every facility for that purpose having been afforded by the officers of the Company. They have all been found kept with proper care and fidelity. They have also visited the work-shops, and

examined to some extent the mechanical branches pertaining to the road.

These appear to have been well managed, and your Committee believe that the work that is turned out of the Company of the work-shops will compare favorably with any establishment of the kind in the country. The new passenger cars we think are very superior.

The pay-roll has also been examined, and we are of the opinion that the salaries, which in the aggregate amount to a large sum, are as low as is compatible with the best interest of the Company.

The officers and employes submitted to an uniform reduction of their wages during a part of the year, but the increased business of the road was such as to justify the directors in restoring their salaries to the original amount.

Your Committee very recently passed over the entire line of the road and found it in good condition, the repairs being well kept up. A considerable amount has also been expended in building warehouses on the line of the road, and the turntable at Glendale, to accommodate the way traffic of the road—all of which has been charged to the running expenses, together with the bridges, some of which have been rebuilt entirely, without interfering with the regular business of the road.

At the time of the last annual meeting the political troubles of the country were such that fears were entertained that the company would not be able, after using the amounts set apart for the sinking fund and for the purchase of the bonds of the Dayton and Michigan Company, to continue to pay regularly the semi-annual dividend; but you have had evidence, the most satisfactorily, in receiving not only your dividend regularly, but in an increased amount, with a surplus from the year's earnings of near \$60,000.

The second year has passed since the consolidation with the Little Miami Company. Your Committee have heard no complaint from any one interested in either company, and we are satisfied that the arrangement will continue to prove of mutual benefit to both parties, while the public interest has not suffered from it.

In conclusion, your Committee will say that the road, with all its appurtenances, is in good order, and has been managed by good and faithful officers, and no doubt need be felt in the ability of the road to earn you a good interest upon your investment.

W. B. MOORES,
A. M. SEARLS,
WM. GOODMAN.

The interest on the sinking fund bonds and second mortgage bonds of the Michigan Southern Railroad Company will be paid 1st May at the Bank of North America. The interest on the first mortgage bonds will be paid at the office of the company.

METROPOLITAN R. R.

The following bill is now pending before Congress for the incorporation of this road:

The Secretary of the Treasury is authorized to guarantee the bonds of the Metropolitan Railroad Company to the amount of two millions of dollars, payable in thirty years at six per cent., to be issued when the said company shall execute a mortgage on their road, rolling stock and property, and also conditioned for two per cent. per annum for a sinking fund for the redemption of the bonds. The company shall immediately construct a railroad to Gaithersburg, Md., and from there connect with the Philadelphia, Wilmington and Baltimore Railroad at such point, near Baltimore, as the Secretary of War may direct; also, to connect with the Northern Central or such other roads as now exist or may hereafter be finished or constructed, running into Pennsylvania or New York, and to make extensions in any direction, and towards any point of the compass.

In consideration of these inordinate and tremendous privileges, the said company is to carry freight at four cents per ton per mile, and soldiers and sailors at two cents per mile.

The second section provides that when the company shall bring evidence of its owners or engineers that it has expended fifty thousand dollars, he shall deliver that amount of bonds.

By section three the company is authorized to lay tracks through any of the streets of Washington and Georgetown.

The fourth section provides for the sale of the road in default of its interest, and its purchase by the United States.

By section fourth the company is authorized to construct a double track upon the line of any railway, when the Secretary of War shall so direct, and authorizes the Secretary of the Treasury to issue bonds to an indefinite amount for such construction upon the demands of the owners of the road.

The rate of fare to be two and a half cents, per mile for through passengers, and three cents per mile for way passengers. Provided that for better accommodations than are now afforded, the company shall have the right to charge an additional rate of one cent per mile.

There are several difficulties in the way of the proposed Metropolitan R. R.

The region of the country through which it purposes to pass is one presenting great natural obstructions to its construction. This of course is a formidable objection. Another very serious difficulty is, that in a thickly settled portion of the country, commercial enterprise should be able to construct all the railroads that are really needed for the business. It is bad policy for the Government to construct lines where individual effort should do it; and especially where the government line would come in direct competition with private enterprises already occupying the field.

The bill while apparently proposing that the Government guaranty only two millions of bonds, really proposes the issuance of an indefinite amount; and for this reason alone, were there no other objections, should not receive the sanction of Congress in its present state.

S. M. Felton, Esq., President of the Philadelphia, Wilmington and Baltimore R. R. in reply to an inquiry made by the Secretary of War, makes the following suggestions:

It is not necessary to construct the whole of the route from Bristol to Chester, through West Philadelphia, as a considerable portion of the present road can be used without any change of route. The proper route for such a track is to leave the Philadelphia and Trenton railroad near or at Frankford, and thence pass through West Philadelphia to a point on the Philadelphia, Wilmington, and Baltimore Railroad near Gray's Ferry. This route would present much less of new route to be built than that indicated in the resolution, would be much less expensive, and could be constructed in a much shorter time. Nearly the whole of this route is projected and authorized to be built by the Legislature of Pennsylvania. Means have also been provided to construct it, jointly, by the Pennsylvania Railroad, the Philadelphia and Reading Railroad, and the Philadelphia, Wilmington, and Baltimore Railroad. It is called the Junction Railroad, and will connect the three roads above mentioned so that cars and engines can pass from one to the other without change; and as the Philadelphia and Reading, and Philadelphia and Trenton Railroads cross each other near Richmond, in the northerly part of the city of Philadelphia, a connection between these two roads can easily be made at the crossing aforesaid. This will secure a continuous and unbroken track between New York and Washington, which could be improved still further by leaving the Philadelphia and Trenton Railroad at or near Frankford, and joining the Reading Railroad near the summit between Richmond and the Schuylkill River, as before indicated, if it were thought advisable to make the expenditure. The latter would be the most expeditious way of getting through the city of Philadelphia, and would doubtless best answer the purposes of the Government.

There is another mode in which a continuous line will be provided and put in operation in a month or two at the farthest, and that is by a ferry boat sufficiently ample to take on board a whole train of cars running from Washington street wharf, in Philadelphia, to Camden, in New Jersey. This will be a very expeditious route for both freight and passengers, and can be put in operation in a shorter time by far than the other route referred to, as nearly all the preparations are already made, and the balance will be perfected as soon as possible.

Obviously the better way for all concerned would be to perfect the present route, by making close and reliable connections at Philadelphia and Baltimore. And in order to avoid municipal restrictions, which are often annoying and vexatious to the public, while they redound to the benefit of no one, it would be well, in my estimation, for Congress to declare the entire road between New York and Washington a post route, to be operated by steam, all the way, and that in the most expeditious manner known to modern engineering, consistent with safety, through the cities. These several companies should be thus vested with the authority to make the connections by steam, and should be required by the Government to make them. This would give the Government all the expedition they could desire and thus aided by Congress, not with money, but only with authority, to do what otherwise they might be unable to do. The present railroads could and would do all the business of the Government more economi-

cally and expeditiously than any new and independent road could do the same.

The rates now charged the Government for the transportation of freight and passengers, between New York and Baltimore, do not average two thirds those charged the public for the same services, and when it is recollected that the business of the public is constant and in both directions, while that of the Government is spasmodic and generally in one direction, requiring empty trains one way and a large surplus of cars at times, in order to be always ready, it will be seen that the rates charged the Government are liberal, on the part of the railroad, and that no road could live and pay dividends on such rates if they had not other and more profitable business to rely upon.

The present business between New York and Washington is not a natural and permanent business. It is one that has grown up in consequence of the war, and is dependent upon the war for its present magnitude. Whenever the Government puts down the rebellion and it is to be hoped it will succeed in doing this speedily, the business between New York and Washington will subside to its ordinary dimensions. Such a business is only adequate to the support of one line of railroad. If it were divided between two, it would furnish hardly enough to keep them both in good running order, thus sinking and rendering valueless the capital now invested in the present line, and ruining, pecuniarily, those who would be tempted to invest in the new and independent line.

I have presumed all along that the Government do not desire and that it is not for its interest to embark in internal improvements, unless a strong military necessity for the same exists. That none such exists, or can exist, between New York and Washington, is proven from the fact that the present line has always transported all the troops and supplies that the Government has required, without delay, and at less rates than an independent or Government road could have done. The present line has, since the war commenced, largely increased its means of transportation, is now ready and will hold itself ready, to transport all the Government may require promptly, reasonably, and, if necessary, to the exclusion of its regular business.

In conclusion I can only add, that the railroad line which I represent has ever been ready to aid the Government with all the resources at its command in its hour of need, and it now stands ready promptly to adopt any improvements calculated to facilitate the business of the Government and the country. It does not ask or expect pecuniary aid, but only suggests that Congress shall give such legislative aid as will enable it to make such connections, in and through the several cities, as the necessities of the case may require.

We think Mr. Felton's arguments should be satisfactory, and would beg to suggest that great national measures, like the Pacific Railroad, which are imperatively needed and which cannot be carried out except by Government aid, will readily absorb any spare means which are at the disposal of Congress.

☛ The Michigan Central earned, in April:

1861, - - - - -	\$172,613 62
1862, - - - - -	175,695 80
Increase, - - - - -	\$3,082 18

A BILL.

Supplementary to an act entitled "an Act for the Assessment and Taxation of Property in this State and for levying Taxes thereon according to its true value in Money, passed April, 7, 1859."

SECTION I. *Be it enacted by the General Assembly of the State of Ohio, That the county auditors of the several counties in this State in which any railroad company now has, or hereafter may have, its track and railway, or any part thereof, shall constitute a board of appraisers and assessors for such railroad company. Provided, if any company has its road or any part thereof, in one county only, the auditor of such county shall constitute such board.*

SEC. 2. The auditor of the county where such railroad company has its principal office, if in this State, and if such principal office is not in this State, then the auditor of the county having the largest city or village upon the line of such road shall be the president of said board, whose duty it shall be to appoint the time and place for the meeting of such board, and notify the proper county auditors of the same at least five days before the time appointed for such meeting. In the absence or inability of the president, the board shall appoint one of its members president, pro tem. In all meetings of any such board a majority of such county auditors shall constitute a quorum, and a majority of those present at any meeting having a quorum, shall decide all questions submitted. Each board shall appoint one of its members secretary, and full minutes of its proceedings shall be kept.

SEC. 3. It shall be the duty of each board to meet annually in the month of June in the present and each succeeding year, at such time as the president thereof may appoint and if no meeting is appointed by him before the third Tuesday in June, the several county auditors shall meet in the place where the proper railroad for which said auditors constitute the board aforesaid has its principal office, or in the principal city or village upon the line of such road, as the case may be, and proceed to ascertain all the personal property which shall be held to include road-bed, water and wood stations, and such other realty as is necessary to the daily running operations of the road, moneys and credits of such company and the actual value thereof in money. Such boards shall require from the president, secretary, receiver, and accounting officer of such road, a detailed statement, under oath, of all the items and particulars constituting such property, moneys and credits, and such value thereof, and may examine the books and papers of such road and any or all of its officers, receivers, servants or agents, under oath, touching any matter relating to the same. Any county auditor present at such meeting is authorized and empowered to administer such oath.

SEC. 4. Any president, secretary, receiver, accounting officer, servant or agent, of any railroad company, having any portion of its road way in this State who shall refuse to attend before the proper board of appraisers and assessors when required so to do, or refuse to submit to the inspection of said board any books or papers of such railroad company in his possession, custody or control, or shall refuse to answer such questions as may be put to him by said board or its order, touching the business, property, moneys and credits, and the value thereof, of said railroad company, shall be guilty of a misdemeanor, and, on conviction thereof before any court of competent jurisdiction, shall be con-

fined in the jail of the county not exceeding thirty days and be fined in any sum not exceeding five hundred dollars and costs, and president, secretary, receiver, accounting officer, servant or agent as aforesaid so refusing, as aforesaid, shall be deemed guilty of contempt of such board, and may be confined by order of said board in the jail of the proper county until he shall comply with such order, and pay the cost of his imprisonment.

Any president, secretary, receiver, accounting officer, servant or agent of any railroad company, who shall knowingly make any false answer to any question put to him by such board or by its order, touching the business, property, moneys and credits and the value thereof of said railroad company shall be guilty of perjury.

SEC. 5. The value of such property, monies and credits of any railroad company as found and determined by such board, shall be apportioned by said board among the several counties through which such road or any part thereof runs in the same proportion that the length of such road in said county bears to the entire length thereof in all of said counties and the board shall certify to the auditor of each county interested, the amount apportioned to his county.

It shall be the duty of the county auditor, upon receiving such certificate, to apportion the amount therein stated to the cities, incorporated villages and townships in his county, in proportion as the miles or parts of a mile of such road in each bears to the whole number of miles of said road in his county, and assess thereupon the same rate of tax for all purposes as is chargeable upon personal property in said city, incorporated village or township.

SEC. 6. Any railroad company may appeal from the decision of the board, fixing the valuation of the road, to the auditor of state, within thirty days thereafter, upon giving such board, or the president thereof, five days notice of the time appointed for hearing the same. The auditor of state shall decide all appeals, and his decision shall be final.

SEC. 7. Each auditor shall be paid from the treasury of his county the sum of three dollars for each day's attendance as a member of any board aforesaid under this act, and five cents a mile going to and returning from its place of meeting.

SEC. 8. When any railroad company has parts of its road in this state, and part thereof in any other state or states, the proper board shall take the value of such property, monies and credits of such company as found and determined aforesaid, and divide it in the proportion the length of such road in this state bears to the whole length of such road, and determine the principal sum for the value of such road in this state accordingly.

SEC. 9. So much of section sixteen of the act entitled "an act for the assessment and taxation of property in this state, and for levying taxes therein according to its true value in money" passed April, 5 1859, as relates to railroad companies, and is inconsistent with this act, be and the same is hereby repealed.

SEC. 10. This act shall take effect and be in force from and after its passage.

— The Rock Island Railroad earned, in April:

1861, - - - - -	\$75,233
1862, - - - - -	71,076
Decrease, - - - - -	\$4,157

LONDON GAS WORKS.

[Continued from page 129.]

At the Horseferry road station of the Chartered Gasworks there are equal to 340 long retorts, or 680 mouth pieces. Some are set 11 in a bench, although a smaller number appears to be preferred. At the Goswell street works, some of the retorts are but 9 ft. long, and worked from only one end. There are 544 mouth pieces, equal to 272½ full length retorts. All are set 5 in a bench. At the Curtain road works only single end retorts, 9 ft. long, are used, and of these there are 155, equal to 77½ retorts 18 feet long.

The Vauxhall station of the Phoenix Company has 357 retorts, 20 ft. long, most cylindrical, and all set 7 in a bench. At Bankside there are 140 retorts, of the same length and shape, and set 7 in a bench. At Greenwich a smaller number is used.

The City of London Gasworks, Dorset street, have single and double retorts, mostly cylindrical, equal to 940 of the former, or 470 of the latter. There are but few single retorts. A small number also of old retorts are of iron. The usual number placed in a bench is 7, although some are set 5 together.

The London Gasworks, Vauxhall, have about 250 retorts, mostly cylindrical, 16 in. in diameter, and say 19 ft. long. They are usually set 9 in a bench, with one fire grate at each end of each bench, although a number are set 12 in a bench, with two fire grates at each end.

The Equitable Gasworks have, we believe, 30 benches of long retorts, some with 7 and some with 8 in a bench.

The Commercial Gasworks have 270 long retorts set, mostly 7 in a bench.

The Radcliff Gasworks have 105 long retorts, set 7 in a bench.

The South Metropolitan works have 195 long retorts, all but one bench containing 7 in a bench.

The Great Central Gas Consumers' works have 279 long retorts, 11 being the number generally set in a bench. The benches are very high, and the retort-house is divided into two stories, 7 retorts opening the upper stage, and 4 below, where the fire is made. The retorts are all of clay. Originally, Mr. Croll, the former engineer, and afterwards the contractor for carrying on the works, made the fires on a level with the upper stage, where the heat first acted upon 6 clay retorts, afterwards descending and acting upon 7 iron retorts below.

The Surry Gas Consumers' works, until lately worked by Mr. Croll, have 16 benches of long elliptical retorts, the retort house being divided into two stories. The fires are made upon the upper stage, where the fire from each grate acts first upon 6 clay retorts 15 in. in diameter, afterwards descending to 8 cast iron retorts below, there being 14 in a bench.

At the Western Gasworks there are 165 retorts, 20 ft. long, set generally 7 in a bench. We may here notice a peculiarity of the retort house at these works. As originally designed by Mr. G. H. Palmer, it is a 12-sided building, forming a dodecagon in plan. The retorts were originally placed around the building against the sides. When long retorts afterwards came to be used, all the benches were taken down and others set up so as to form ranges radiating from the centre of the house outwardly.

We can not at this moment give the number of retorts at the Independent Gasworks.

At the various works of the Chartered Gas

Company, and at the South Metropolitan works, the retorts are built on the spot of fire bricks. At all the other works we believe that retorts moulded in fire clay are exclusively used, with the exception only of the small number of iron retorts already mentioned. Mr. Grafton, of Cambridge, patented the clay retort in 1820, and it soon after came into extensive use in Scotland; so soon, indeed, that Mr. J. B. Neilson, the patentee of the hot blast, and who was originally engineer to the Glasgow Gasworks, has had the credit of the first application of clay to gas retorts. It was many years, however, before clay retorts came into extensive use in England. An iron retort 20 ft. long, and of medium diameter, weighs about 2 tons, cost, say £12, and is worn out after having distilled about 1,500,000 cubic feet of gas (750,000 feet, if the retort be a single one, 9 ft. or 10 ft. long), which is equal to about an average year's work. A clay retort of the same size costing 6s. per foot, or £6, will generally be in good condition after three years' use, and some are said to have been worked for from five to eight years. Rather more fuel is required for heating clay retorts than is necessary with iron, but the former can be worked at a higher heat, which gas engineers generally consider an advantage. In America, where the cheapest gas (made at Pittsburgh from coal dug almost at the doors of the works) cost 6s. 3d. per 1000 ft. the price in New York being 10s. 6d., and in Philadelphia 9s. 6d. per 1000 ft.; clay retorts are only beginning to be used, notwithstanding, too, that the old single end iron retorts have sold there for nearly £14 a ton.

Fire clay retorts are made in the neighborhood of Newcastle, and elsewhere; and we are not sure that the London gas companies do not import them occasionally from Belgium, where also they are extensively manufactured. A good fire clay should be as nearly as possible pure silica and alumina, combined as a silicate of alumina. The presence of lime and iron, which makes almost the whole of the difference between fire bricks and ordinary bricks, renders the clay fusible in proportion to the extent to which these impurities are present. The Dynas clay, from Wales, is in high repute among gas engineers, and the Stourbridge and Newcastle fire clay divide the suffrages of many experienced men. We have even heard Cowan's Newcastle fire bricks pronounced superior to Stourbridge, notwithstanding that the former cost but about 60s. a thousand, the latter fetching, say 90s., and Dynas bricks somewhere about 110s. Some clays expand under the action of fire, others shrink, and there are others still, among which we believe, are the three varieties named, whose bulk is hardly affected by any degree of heat.

The fire clay retorts are moulded about 2½ in. thick, and generally in length of from 4 ft. to 6 ft. The lengths intended to form the outer ends of the retort are thickened to rather more than 3 in., and holes are formed in the clay to receive five or six bolts for holding on the mouth pieces, which are short extensions of the retort, and which are always of cast iron. To fasten the several lengths of the retort, end to end, together, so as to form a single retort, is easily accomplished by introducing at the joints, and in a plastic state, a little fire clay, as nearly as possible of the same quality as that of which the retort itself is made. With this clay in the joints, precisely as mortar is interposed between ordinary bricks, the retort is "set" or got into place in the "bench," where a high heat is applied, and the separate lengths burnt into one continuous tube, complete and ready for use. Of course

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	48		\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.	380		13,111,800	10,781,833	566,070	3,922,203	2,205,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	2,000,000	5		1885	
do do										"	2,000,000	6		1880	
do do										"	700,000	6		1875	
do do										"	1,125,500	6		1867	
do Washington Branch.....	Md.	30		1,650,000						"	1,000,000	6		1866	
Bellefontaine and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7		1870	
do do										2d "	169,000	7			
Buffalo and State Line.....	N.Y. & Pa.	121	68	1,950,950	1,049,000	27,545	911,019	492,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000	6		1864	
Camden and Amboy.....	N. J.	96		3,98,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	450,000	7		1861	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	800,000	7		1864	
do do										1st "	80,000	7		1865	
do do										3d "	950,000	7		1865	
do do										4th " S. F.	1,361,000	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7		1865 & 1870	
do do										2d "	600,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	235,787	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7			
do do										2d "	1,545,000	7			
do do										3d "	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d "	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.....	1,250,000	7	80	Feb & Aug 1	
do do										2d "	2,000,000	6	11	May 1.	
Chicago and Rock Island.....	Ills.	55	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7		1870	
Chicago, Burlington and Quincy.....	"	61 1/2	138	4,689,340	4,811,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	90	1863	
do do										" 2d " S. F.	813,000	8		1860	
do do										1st Mor. Chi. & Aur.	394,000	7		1867	
do do										2d " "	303,000	7		1869	
do do										1st " Cent. Mil. Tract	39,000	7		1864	
do do										2d " "	245,000	8		1868	
Chicago, Iowa and Nebraska.....		82		No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	60		2,155,800	1,356,000		644,238	174,595	Mar. 31, 1861	1st Mortgage.....	441,000			1867	
do do										2d "	950,000	7		1880	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	194,000				
do do										Income.....	305,500				
Cleveland and Mahoning	Ohio.	68 1/2		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7			
do do										2d "	4,000,000	7			
do do										3d "	341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	18 1/2	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	13 1/2	1880	
do do										2d " M. L. or 1st Ex.	1,188,000	7		1873	
do do										3d " 2d Ex.	1,163,000	7		1865	
do do										4th " 3d Ex.	1,154,000	7			
Cleveland and Toledo.....	Ohio.	46 1/2	148	3,343,800	3,550,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jan. 1st Div.	359,000	7		1867	
do do										1st " " 2d Div.	263,000	7		1872	
do do										2d " " "	235,000	7		1862	
do do										1st " Tol. Nor. & Cleve	521,000	7		1863	
do do										2d " " "	293,300	7		1861	
do do										Junction Income.....	44,300	7		1862	
do do										C. & T. Income.....	300,000	7		1864	
Cleveland, Columbus and Cincinnati ..	Ohio.	109	135	4,746,100	512,000	4,201	1,255,093	654,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula ..	"	98 1/2		3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7		1861	
do do										2d "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	54 1/2		1,490,000	290,700	50,500	See L. Miami.			Dividend.....	972,700			1860 to 1866	
Columbus, Piqua and Indiana	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666	2,512,000	292,267	375,002	212,107		2d "	2,212,000	8			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7			
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000	7		1875	
do do										2d "	1,000,000	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,702	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		966,061	1,219,100	249,685	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d "	18,000				
Galena and Chicago Union.....	Ills.	69	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000		100	1862 & 1863	
do do										2d "	1,520,000		99	May 1, 1875	
Great Western	Ills.	175		1,600,000	2,391,000		455,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report										
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573							
Hannibal and St. Joseph.....	Mo.	206		1,041,000	10,554,000	220,306	996,907	512,933	Sept. 1, 1860.	Land Mortgage Conv.....	5,000,000		67 1/2		
do do										Mortgage.....	1,354,000	0			
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	334,136	Aug. 31, 1861	1st Mortgage.....	927,000	6		1873	
Hudson River.....	N. Y.	35 1/2	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	102	1869 & 1870	
do do										2d "	2,000,000	7		1870	
do do										3d "	184,000	7		1875	
Illinois Central.....	Ills.	65 1/2	455	15,654,900	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000	7	86	1863	
do do										Construction.....	13,855,000	7	93	1875	
do do											4,115,000	6		1875	
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	Debentures.....	42,740				
do do										1st Mortgage.....	60,000	7			
do do										2d "	578,000	7			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,234	140,689	448,858	230,834		Income.....	38,700	10		1866	
do do										1st Mortgage.....	500,000	7			
do do										2d "	40,000	7			
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort.....	200,000	7			
do do										1st Mortgage.....	649,984	7			
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d "	314,000				
Iron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.	86 1/2		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,831	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	123,797	Dec. 31, 1860.	1st	249,000	7		1861	
do										2d	392,000	7		1873	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st	250,000	7			
do										2d " Conv.	1,000,000	7			
do										3d	600,000	7			
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	301,000				
do										2d " E. D.	1,000,000		12		
do										1st Land Grant W D	4,000,000				
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report		June 30, 1861	1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.	29		514,433	130,000		19,314	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883	
Little Miami.....	Ohio.	61					1,530,650	529,981	Jan. 1, 1862	City Loan.....	174,000				
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		243,910	98,679	June 30, 1861	1st Mortgage.....	218,000	7			
do										1st Mortgage.....	2,000,000	7			
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,503	99,020	Dec. 31, 1860.	1st Mortgage	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.	203		8,561,213	190,408	108,150	430,049	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868	
do										3d "	1,500,000	7			
do										Sterling Income...	333,000	4			
do										Domestic	928,617	6			
Michigan Central.....	Mich.	55 1/2	284	6,037,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	1st Mortgage.....	467,483	6		1872	
do										1st " Conv.	500,000	8	100	1869	
do										1st " unconv.	250,000	8		1860	
do										1st " Dollar Conv.	2,598,000	8		1869	
do										1st " N. F. Conv.	4,153,000	8		1862	
Michigan South'n & North'n Indiana	Mich &	24 1/2	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. S.	991,000	8 1/2		1860	
do										" Nor. Ind.	985,000	8 1/2		1861	
do										" Goshen Line.	1,168,000	8 1/2		1868	
do										S. F. Toledo	2,500,000	8 1/2		1865	
do										2d Mortgage	2,465,000	7 3/4		1877	
do										1st Mortgage.....	400,000	8			
do										2d "	20,000	8			
do										1st Mortgage.....	420,000	8			
do										2d "	600,000	8			
do										1st Mortgage.....	2,550,000	7		1891	
do															
do										1st Mortgage Conv.	1,000,000	7			
do										2d " S. F.	400,000	8			
do										Oskaloosa Div.	1,425,000	7			
do										Land Grant.....	7,000,000	7			
do										Mortgage.....	711,000	7			
New Jersey	N. J.	33	34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.						
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,386	Dec. 31, 1860.	1st Mortgage.....	3,000,000	10 1/2			
New York and Erie Pref.....	N. Y.	61 1/2					5,590,916	1,979,408	Sept. 30, 1860.	2d	4,000,000	96			
do		37 1/2		Sold under mortgage						3d "	600,000	8 1/2			
do										4th "	4,900,000	76			
do										5th "	1,792,500	76			
New York and Harlem Pref	Conn.	31 1/2	138	5,717,190	6,035,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7		1873	
do		73								2d	1,000,000	7		1864	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,373	Apr. 1, 1861	Mortgage.....	912,000	7		Dec. 1, 1866	
do											972,000	6		Oct. 1, 1875	
New York Central.....	N. Y.	83 1/2	556	24,000,000	14,613,005	none.	7,369,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,925,000	7		May 1, 1883	
do										Mortgage.....	3,000,000	7	10 1/2	June 15, 1864	
Northern Central.....	Md.	138		2,260,000	5,890,300	537,026	1,018,103	283,627	Dec. 31, 1860	Construction.....	2,096,500	6		1885	
North Missouri.....	Mo.			2,433,736	4,350,000	93,795	96,731	96,731	Nov. 1, 1860	State Loan.....	4,500,000	6			
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased.	9,680,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6			
do										2d	310,995				
do										Construction.....	4,637,920				
do										Income.....	3,591,185				
Ohio and Mississippi, Western Div....	Ills.	148			3,292,403		No report								
Pacific	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000	6	38		
do										" S. W.	2,800,000	6			
do										Construction.....	4,500,000	6			
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,905,000	6		1888	
do										2d	2,319,000	6		1875	
do										2d " Sterling.	1,957,410	6		1875	
do										State Works.....	7,200,000	5			
Peru and Indianapolis.....	Ind.	74		1,100,090	820,000	80,000	No report								
Philadelphia, Wil. and Baltimore.....	Del.	98		6,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage	2,300,000	6		1884	
do										Improvement.....	119,000	6		1863	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,757,273	2,335,303	761,555	June 30, 1861	1st Mort. O. & P ..	1,000,000	7		1865	
do										2d "	750,000	7		1868	
do										1st " O. & I.	1,000,000	7		1872	
do										2d "	380,000	7		1873	
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,669	80,557	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000				
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,328	220,850	68,434	May 10, 1861.						
Sandusky, Dayton and Cincinnati. .	Ohio.	170		2,697,690	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856	
do										"	997,000	7		1866	
do										"	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,974	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886	
do															
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	56		40,975	500,000	100,000	110,200	53,100		1st Mortgage.....	500,000				
do		50		1,000,000	1,650,000	200,000				2d	40,000				
Stuebenville and Indiana.	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d "	900,000	7		1865	
do										1st Mortgage Conv.	1,000,000	7	75	1862	
do										2d " Conv.	200,000	7		1868 & 1870	
do										1st " Bel. & Ill.	517,000	7		1873	
do										1st Mortgage.....	210,000	7	75 1/2	1866	
Terre Haute and Richmond.....	Ind.	100	73	1,381,450	220,000	none.	377,652	216,183	Dec. 1, 1861.	1st Mortgage.....	3,400,000	7		Aug. 1, 1865	
Toledo, Wabash and Western.....	Ohio & Ind	54	243	2,123,500	5,996,049	52,389	333,345			2d	2,510,000	7	45	Nov. 1, 1878	
do										Mort. Coupons....	96,049	7		1880 to 1885	

all the retorts in a bench, where there be 5, 7, or a dozen or more, are thus burnt together at the same time. It is usual to make a narrow shallow groove in each abutting end of the several lengths the fire clay for jointing thus having a better hold while soft. Many gas engineers, however, now order retorts without this groove, the abutting ends being left as smooth as the other surfaces of the retort.

Clay retorts, unless encircled by frequent thickness of brickwork, would crack, and probably break down altogether. We have, it is true, heard something about clay retorts being set and worked in some of the French gasworks, while supported only at the ends, but nothing of the kind is attempted in London. Clay retorts crackle upon the surface, even when, as in all London gasworks, fire brick partitions or bonds are built completely around them at distances of from a foot to 15 in. from centre to centre for the whole length of the retort. Through these walls, 4 inches thick, and a dozen or fifteen in number, a 20 feet retort passes much as a boiler tube might extend through a succession of tub plates, only there is perhaps no necessity for absolutely tight joints in the brickwork outside of gas retorts, at least the brickwork within the walls of the bench in which they are set. We have referred to the bond walls before commencing to describe the setting of retorts, and for the reason that these walls do not particularly affect the distribution and action of the heat, but are provided chiefly to secure the integrity of the retorts themselves, and may thus be regarded as part of their own structure. Clay retorts, however protected, must be very gradually heated, and as gradually let down, else they will be very apt to crack.

Retorts built up of separate fire bricks have been used for many years, and Mr. Spinney has made them, in this manner, of the size of large ovens, say five feet wide, or thereabouts, at the bottom. Of the fire brick retorts now made in the London gasworks, few, however, are over 20 inches wide at the bottom. The advocates of fire brick retorts declare that they will neither crack nor leak. Inasmuch as they cost but little, if any, more than moulded clay retorts, last at least as long, require no more fuel for heating, and involve no especial difficulties or inconveniences, one would suppose that, if they possessed any merits, they would be in general use. These negative virtues are insufficient, however, to commend them to gas engineers generally. We suspect the chief reason to be that, as they must be constructed and burnt together at the gasworks, men who have had no experience with them (and here we include nine tenths of all gas engineers) are disinclined to incur the care and possible chances of failure of making them, and, therefore, with the retort maker's commercial travellers omnipresent, prefer buying outright that which is known to answer, and which, if it fail, can be returned to a responsible tradesman who undertakes to make good all defects. For our own part, we are inclined to believe that the brick retorts are the cheapest in the end; but it is, perhaps, too much to expect men to enter upon a business in which there is nothing to protect them from themselves, whereas, by giving out a contract, they can transfer the whole responsibility to other shoulders, whose owner is glad enough—for the sake of profit—to take all the risk.

At the Horseferry road station of the Chartered Gasworks the bricks intended for retorts are made of Dinas (Welsh) clay, and are 15 in. long, about 2½ in. thick, and moulded to the curve of the sides and top of the retort.

The floor of the retort is made of successive lengths of fire clay tiles, or slabs, about 3 in. thick, except on the two edges corresponding to the sides of the retort, where the tile is rabbetted to receive the lower edge of the side bricks. All the bricks are laid upon a wooden centre and made to break joint with each other. The cementing material is plastic fire clay, of the same quality as the bricks themselves, and applied just as ordinary mortar would be applied. The retort being thus successively built up within the bench, a strong heat is put upon them and the joints baked together, just as the several lengths of fire clay retorts are made to unite in one continuous whole.

At the Goswell street station of the Chartered Gas Company, Mr. Upward, the engineer, employs Cowen's Newcastle bricks in building retorts. At the South Metropolitan, Mr. Livesey also uses Cowen's bricks, each brick being made to lap for half its thickness, at each end, upon those contiguous to it, while grooves, made to secure a better hold of the fire clay used in jointing, are scored in the longitudinal edges. The tiles are made from the Ewell fire clay, which, although containing sufficient iron to give it a bright red color, and although of a friable nature, almost as much so, indeed, as Bath bricks, is scarcely affected by heat. Mr. Livesey adopts a thickness of 3 in. for his retort bricks, and 3½ in. for the tiles forming the bottoms. At the Crystal Palace District Gasworks, at Sydenham, Mr. Christie adopts Stourbridge in preference to Newcastle bricks for retorts, although, thus far, in the Commercial works, of which Mr. Christie formerly had charge, he had generally employed clay retorts of the common kind. There is a decided and distinguishing difference in the color of the Stourbridge and Newcastle fire bricks, the former having a flesh color, while the latter, when new, are of an almost milky whiteness. It is curious to note that after the lightest colored bricks have been subjected to long service in a gas retort, they are found to have acquired a reddish, and often a dark red color. When broken up, ground under edge runners, and the powder again tempered and moulded into bricks, old fire clay retorts will come out a deep red. This can result only from the acquisition of iron from the coal carbonized in the retorts.

The setting of retorts is a matter of much importance, the objects being to secure a high and uniform heat upon a the retorts in a bench with the least expenditure of coke in firing. A Mr. Rackhouse is said to have been the first, and as long ago as 1815, to introduce the plan of setting each nest of retorts in an oven, the plan now invariably adopted in all the gasworks of London. With the long retorts now used, these ovens may be described as tunnels about 18 ft. long, 6 ft. or 7 ft. wide, and of a height corresponding to the number of retorts to be enclosed. The arch or crown of the oven is semi-circular, or semi-elliptical, and is turned in firebricks, of which, also, all the surfaces exposed to the heat are formed. The floor is laid over ordinary brickworks, beneath which a coke pit is formed in many works, as at the Chartered, Phoenix, and several others. In the newer works, however, and generally, indeed, where the value of space is not excessive, none of the brickwork extends further below the floor of the retort house than is necessary to secure a good foundation. The furnace for firing the retorts is made at each end of the oven or tunnel, the grate being proportioned to the work to be done, a width of 15 in. and a length of fire bars, in each furnace, of about 2 ft. or 30 in. being a common allowance for a bench of seven re-

torts. Over the fire bars is generally turned a small arch of fire bricks, the heat being led off on each side to act upon the retorts, around which it circulates in rising between the numerous partition walls previously described. The upper and lower retorts are separated from each other, for their whole length, by fire bricks or tiles, the heat being seldom allowed to act directly upon the bottom of a retort, but more generally upon the sides, and upon the top, where the heat is reverberated from the underside of the crown of the oven. After the retorts are in their places, the ovens are closed at both ends by brickwork built in and around the retorts, and out to the sides and top of the oven. The heat from the furnace, after rising on one side of a vertical tier of retorts, generally descends down the other side, what is left escaping into a flue below, which is in communication with the chimney stalk. With clay retorts the heat is generally such that an iron damper in the main flue would be melted in short time, and hence fire clay dampers are employed. Even the chimneys, where built of common bricks, are generally cracked by the heat, and in one of the most recent gasworks in the neighborhood of London—that of the Crystal Palace District Company—the chimney has been made of fire brick throughout; the circular shaft, 14 in. in thickness all around, being formed of radial bricks, bonded together at intervals of the height of the shaft, by rings of large firebrick segments 4 in. thick.

The side walls and arches of the furnace (not those of the ovens) are frequently burnt out in from three to six months, although they may last for a year. The setting is generally such that they can be renewed without disturbing the retorts. The durability of the retorts has already been touched upon. Three years is perhaps a fair lifetime for clay retorts worked at a high heat. The inner walls of the ovens should last for a number of years, say eight or ten. Whenever they require rebuilding everything set up within the oven must, of course, come out.

It is customary to tie the brick work of the retort benches together, both in the direction of the retorts and along the length of the retort house, by tie bolts, taking hold of "buck staves" or clamps. With iron retorts there is, of course, considerable expansion on their first being heated, and it is well known that, under the action of heat, cast iron dilates permanently—a cast iron fire bar, for example, gradually extending half an inch or more in length, although its elongation under any one heat may not amount to nearly as much. A 20 ft. cast iron retort becomes, in this way, permanently elongated by from 3 in. to 5 in., and its outward thrust in this expansion must of necessity be great. With clay retorts, however, especially if the clay be of a kind which does not increase in bulk on being heated (most clays contract by heat), there is little or no disruptive strain upon the brickwork, and at the Crystal Palace District and other gasworks, Mr. Christie has entirely dispensed with tie bolts and buck staves.

[To be continued.]

 The earnings of the Toledo & Wabash Railroad for April were:

1862, - - - - -	\$83,582 40
1861, - - - - -	75,273 76
Increase, - - - - -	\$8,308 64

 We call attention to the new running Time, in another column.

MONETARY AND COMMERCIAL.

The condition of the money market has not materially changed since our last week's review. A continued increase in the supply of capital without any corresponding increase in the demand. Prime paper is assiduously sought after, and bought at low rates. A good deal of care is, however, still exercised in selecting. There is a general feeling of hope and buoyancy in the future, and unless some remarkable reverses should overtake the government arms, the swelling flood of capital will run speculation wild. It would be well for our legislators to throw all the guard possible around bank issues, and to do all in their power to prevent an undue expansion, to which we are fast approaching.

The annual election of Directors of the Cin. Ham. & Dayton P. R. was held on Tuesday.

The old board, Messrs. S. S. L'Hommedieu, George Carlisle, J. W. Ellis, George Hill, J. W. Hartwell, Stanley Mathews, and Dr. L'Hommedieu, of this city; Wm. Beckett of Hamilton, and J. B. Varnum, of New York, were re-elected.

The annual report shows that the proportion of gross receipts for the year appertaining to this road under the combination contract with the Little Miami R. R. amounts to \$646,205 57, being an increase of \$84,524 05 over the gross receipts of last year. The operating expenses are reported at \$316,400 99 being also an increase of \$26,835 25 over last year. Other expenses, such as interest on bonds, taxes, etc., \$108,913, making the net income for the year \$220,801 51. Two dividends have been paid during the year—3½ and 4 per cent., amounting to \$161,985 00 leaving a surplus in the treasury of this years earnings, which added to the surplus on hand at the beginning of the year of \$35,041 23 makes a total surplus in the treasury of \$94,157 74. Sales of the stock of C. H. & D. R. R. have been made during the week past at 95 ¢ cent and holders ask a further advance. Little Miami is quoted at 100½ @ 101.

The Bank of the Ohio Valley has declared a semi-annual dividend of 5 per cent.

There has been but a moderate demand for exchange, with an easy market. The demand for Gold has produced an increase in rates of 1½c. during the week. Quotations are:

	Buying.	Selling
New York.....	par	¼ prem
Boston.....	par	¼ prem.
Philadelphia.....	par	¼ prem.
Baltimore.....	par	¼ prem
Gold.....	21¼ @ 1 prem.	3¼ prem

Annexed is the report of W. Key Bond, Receiver of the Wilmington & Zanesville Railroad, showing its business for the month of March:

GROSS EARNINGS.

Passenger through business, \$ 72 55
Passenger local business, ... 4,524 32
Mail, ... 831 25

Express,.....	300 45—\$5,728 57
Through freight,.....	357 78
Local,.....	6,990 68 7,348 46
Gross earnings,.....	\$13,977 03

EXPENSES.

Working expenses,.....	\$9,154 75
Extraordinary expenses, ..	2,636 45
Corporate expenses,.....	2 00
Construction expenses.....	2 00
Equipment account,.....	365 69—12,060 79
Balance,.....	\$1,016 24

The interest, due May 1, on the mortgage bonds of the Cleveland & Pittsburgh Railroad Company will be paid at No. 25 William street, by H. C. Kingley.

The Erie Railway Company gives the annexed notice:

Notice is hereby given to the holders of the outstanding unsecured bonds and certificates of stock of the New York & Erie Railroad Company, not exchanged under the contract of reorganization, that the time for the surrender of said bonds and stock has been extended by act of the Legislature to the 1st of July next.

Any holder of such bonds or certificates of stock can exchange them for preferred and common stock in the new company upon payment of an assessment of \$2 50 per share of the stock to be issued, and interest on the same from Sept. 1, 1861, payable on delivery of the new certificates. The time fixed by law for such exchange will expire on the 1st day of July next, and no exchange of stock or bonds of the old company can be made into new stock in the new company after that day.

HORATIO N. OTIS, Sec'y.

Transfer Office, No. 11 Pine-st., New York, March 31, 1862.

The business of the Delaware & Hudson Canal Company for the year ending March 1, 1862, was as follows:

Sales of coal to March 1, 1862,.....	\$2,406,514 37
Canal and railroad tolls collected, ...	367,953 56
Profits on barges, etc., ...	31,215 45
Coal on hand at Honesdale, Round-out, and New York, and on the line of canal, ...	354,446 00
Total, ...	\$3,160,129 38
Coal on hand March 1, 1861, ...	\$248,321 40
Mining coal, ...	681,614 64
Railroad transport, repairs, and superintendence, ...	551,294 84
Freight of coal on canal, ...	544,278 59
Rent, salaries, current expenses, etc., ...	92,546 21
Coal yard and harbor expenses, taxes, interest, etc., ...	349,986 10—2,468,045 05
Net profits, ...	\$692,033 53

—being a little over 9 per cent. on the capital stock of the company.

The following is a comparative statement of the earnings and expenses of the Buffalo, New York & Erie Railroad for the six months ending April 1st:

	1862.	1861.
Passengers,.....	\$60,965 95	\$52,943 18
Freight, ...	356,176 60	223,069 35
Other sources,.....	21,807 62	14,638 13
Total, ...	\$438,950 16	\$291,650 66

EXPENSES.

Maintaining road, ...	\$71,662 93	\$48,008 30
Repairing machinery, ...	52,460 69	34,846 97
Operating road, ...	112,101 26	91,932 95
Total, ...	\$236,224 88	\$174,787 32
Net earnings, ...	202,725 30	116,803 34
This makes the increase for six months \$85,861. The net earnings of that period were \$202,000.		

The receipts of the Harlem Railroad for the first three months have been:

	1861.	1862.
January,.....	\$103,494 63	\$100,922 75
February,.....	88,201 46	96,936 38
March,.....	88 790 72	103,020 32
Total, ...	\$280,486 81	\$300,882 45
		280,486 81

Total increase for 3 months of 1862, \$20,395 64

The Harlem Company did not run any express trains to Albany this year, causing a great saving of expenses. The way travel and freight have largely increased, and to this cause alone is to be attributed the increase of receipts.

The Milwaukee & Prairie du Chien Railroad earned, the third week of April:

Passengers,.....	\$1,185 88
Freight,.....	8,054 70
Mails and rents, ...	1,015 94

Total, ...	\$13,256 52
Corresponding week 1861, ...	10,766 43

Increase, ... \$2,490 09

DECISION.—The following is the report of a decision in the Supreme Court of New York at its April term, Judge Hoyt presiding.

Jane C. Engelbrecht vs. The Eighth Avenue Railroad Co.

Plaintiff sued to recover damages for injuries sustained by her in 1859, while getting off one of the Eighth avenue cars at the corner of Robinson street. It appeared that the driver stopped the car to let a boy get off the front platform, and Mrs. Engelbrecht went to the rear part of the car and was in the act of stepping off when it started, throwing her down and injuring her so that she was confined to her house for two months.

The defense set up that the plaintiff was negligent in failing to notify the conductor of her intention to leave the car.

Verdict for plaintiff for \$300.

PITTSBURGH, FT. WAYNE & CHICAGO R. R.—

The office of auditor, formerly existing in the organization of the late Pittsburgh, Fort Wayne and Chicago Railroad Company, has been abolished.

Mr. Thomas D. Messler has been appointed Comptroller, and will assume the duties appertaining to such an office.

All settlements of accounts and adjustments of balances, whether for freight or passenger business, or otherwise, due to or from the Company, will be made under the direction of the Comptroller; and officers or agents of other Companies, or parties, will render their reports of such business to him, and will communicate with him in relation thereto.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.

TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:30 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton
RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day, Toledo & Day, Huntsville.....	5:20 P. M.	10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY Night in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Terre Haute and Lafayette and Chicago Mail.....	5:05 A. M.	11:10 A. M.
Indianapolis and Chicago Night Express.....	3:20 P. M.	11:50 P. M.

Ohio and Mississippi Railroad.
CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	5:00 A. M.	10:45 F. M.
Seymour Accommodation.....	3:00 P. M.	8:45 A. M.
Louisville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES slower than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots.

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

P. W. STRADER.

General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

W. H. L. NOBLE.

General Ticket Agent Indianapolis & Cincinnati Railroad.

E. F. FULLER.

General Ticket Agent Ohio & Mississippi R. R.

McCALLUM, BRISTOL & CO.,
BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct McCallum's PATENT INFLEXIBLE ARCHED TRUSS BRIDGE, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge and in the most approved and perfect manner. Parties desiring information, will please apply to the firm at their Office 99 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y.

Ag. 26.

MIDDLETON & STROBRIDGE,
LITHOGRAPHERS AND ENGRAVERS,

Walnut St., CINCINNATI.

Special attention given to all kinds of work in our line, such as Show Cards in one or more colors, Maps, Bonds, Portraits, Certificates of Stock, &c., &c.

J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,

my21

CINCINNATI

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

NEW YORK, BOSTON,
AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

feb 6. CHARLES MINOT, Gen'l Sup't.

Baltimore and Ohio Railroad

RE-OPENED!



This great national thoroughfare is again open for

Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition, The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.

J. H. SULLIVAN, Gen. Wes. Ag't, Bellaire, O.

L. M. COLE, Gen. Ticket Agent, Baltimore.

CHICAGO, GREAT WESTERN AND
NORTH-WESTERN LINE—INDIANA-
POLIS AND CINCINNATI SHORT-LINE

RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily for the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M.; Chicago at 6:00 A. M., connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars. Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.

W. H. L. NOBLE,

General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

KNOX & SHAIN,
Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums by Franklin Institute.)

OHIO & MISSISSIPPI
RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCEN-
NES, Cairo, and St. Louis.

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.

RETURNING.—Mail Train Leaves East St. Louis, (Sundays excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M. arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office No. 5 East Third street; No. 1 Burnet House, corner of north-west corner of Front and Broadway; Spencer House Office; and at the Depot corner of Front and Mill Streets.

G. B. MCLELLAN, Gen'l Superintendent

Omnibuses call for Passengers,

November 11th, 1861.

1861. 1861

FAST TIME.

LITTLE MIAMI

AND

COLUMBUS AND XENIA

AND

CINCINNATI, HAMILTON & DAYTON

RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Richmond, Indianapolis, and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express—From Cincinnati, Hamilton and Dayton Depot—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,
General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet Walnut & Vine
CINCINNATI O

W. MORRILL. G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of
O. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

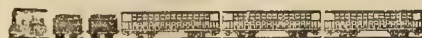
Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction to all.

1862. 1862.
Pennsylvania Central R. R.
285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE.
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
ONE TRAIN RUNS DAILY (430 MILES.)
VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.
ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
D. A. STEWART, Freight Agent, Pittsburgh.
CLARKE & CO., Transfer Agents, Pittsburgh.
R. C. MELDRUM & CO., Madison, Indiana.
J. E. MOORE, Louisville, Ky.
W. W. AIKMAN & CO., Evansville, Ind.
R. F. SASS, St. Louis, Missouri.
CLARKE & CO., Chicago, Illinois.
W. H. & E. L. LANGLEY, Gallipolis, Ohio.
G. B. NEAL, Parkersburg, Virginia.
HALL & CO., Marietta, Ohio.
H. S. PIERCE & CO., Zanesville, Ohio.
McDOWELL & McCOLM, Portsmouth, Ohio.
R. McNEELY, Maysville, Ky.
J. P. JOHNSTON, Ripley, Ohio.
JOHN TODD, Covington, Ky.
G. L. HEATON, Cleveland, Ohio.
R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
L. L. HOULT, Gen'l Ticket Agent, Philadelphia.
H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

BUSH & LOBDELL.
Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,
MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET
NEW YORK.

ALBERT BRIDGES.

JOEL C. LANE

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

brough Distance 280 Miles;

42 Miles Shorter than any other Route
NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M., 3:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth Street Depot.

Freight trains leave at 6:00 P. M. and run directly through to Chicago without rebilling or transhipment.

JOHN BRANT, Jr., Superintendent.

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent.

33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON,
STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and takes collections.

LOW'S RAILWAY DIRECTORY

FOR 1861

CONTAINING

THE NAMES AND RESIDENCES

OF THE

PRESIDENTS, DIRECTORS

AND

OFFICERS

OF ALL THE RAILROADS IN THE

UNITED STATES

If they could be ascertained.

Published by James W. Low.

Price one dollar.

Sent postage prepaid by mail for one dollar and twenty cents.

A few copies only for sale at the office the Railroad Record.

WRIGHTSON & CO. 167 Walnut Street.

N. W. BALDWIN,

MATHEW BAIRD.

M. W. BALDWIN & CO.
ENGINEER'S

BROAD AND HAMILTON ST.

Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned

THEODORE DEHON,

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EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,

LOCOMOTIVE & RAILROAD
CAR SPRING

MANUFACTURER,

WILMINGTON, : DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

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Lafayette, Ind.,

Indianapolis, Ind.,

Columbus, O.,

Dayton, O.,

Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, low-priced FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being alike on both sides, impossible to unravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.

Feb 12.

WM. SUMNER & CO.

MOSELEY'S
WROUGHT IRON
ARCH BRIDGES

—AND—

Corrugated Iron Roofs

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.

Sut. 2.

MOSELEY & CO.

JAMES FOSTER, Jr. & Co.,
MATHEMATICAL AND PHILOSOPHIC-
AL INSTRUMENT MAKERS,
S.W. CORNER FIFTH AND RACE,

Cincinnati Ohio.

Drawing Instruments, Scales of all Kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

H. TWITCHELL.

JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase.

A. G. M. G.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods.

Bar of all Sizes.

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works.

June 9.

THE SCHENECTADY

LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, President.

WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1 1/4 to 10 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from 1/2 inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe — 1/4 to 24 inch diameter, and branches for same, &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS.

CHAS. WHEELER,

THOS. T. TASKER, JR.,

S. F. M. TASKER,

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, MAY 15, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

As square the space occupied by ten lines of Nonpareil.	
On square, single insertion.....	\$1 00
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
“ column, single insertion.....	5 00
“ “ per month.....	10 00
“ “ six months.....	40 00
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“ page, single insertion.....	15 00
“ “ per month.....	25 00
“ “ six months.....	110 00
“ “ per annum.....	200 00
Carden's exceeding four lines, \$5.00 per annum.	

THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.

Cincinnati, Hamilton & Dayton—

Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	10.10 A. M.

Dayton, Lima, Toledo & Huntsville—

Dayton & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.10 A. M.
		5.40 A. M.

Sandusky, Dayton & Cincinnati—

Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.10 A. M.

Marietta & Cincinnati—

Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.

Ohio & Mississippi—

Mail.....	5.05 A. M.	10.05 P. M.
Seymour Accommodation.....	3.00 P. M.	8.45 A. M.
Express.....	5.00 P. M.	6.53 A. M.

Indianapolis & Cincinnati—

Mail.....	5.05 A. M.	11.10 A. M.
Chicago Express.....	3.20 P. M.	11.50 P. M.

Dayton & Michigan—

Toledo, Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.

Cincinnati & Chicago Air Line—

Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.

Cincinnati, Wilmington & Zanesville—

Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.

Kentucky Central— (City time.)

First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

PACIFIC RAILROAD.

The House of Representatives, on Wednesday, May 6th, passed, by a large majority, an act to aid in the construction of a railroad and telegraph line from the Missouri river to the Pacific ocean. We will give this act entire in our next, deeming it one of the most important, if not the most important, measure that has come before the present Congress. When we commenced the advocacy of such a measure years ago, it had but few friends and was deemed a wild and visionary speculation, —one which would ruin the individuals and the nation which should undertake its construction. The arguments which we advanced in its favor convinced the people, if not their legislators, and petitions signed by thousands of high-minded, intelligent people found their way in countless numbers to the Halls of Congress. They came from city and from hamlet, from town and from country, from Maine to Oregon, from Florida to California. Political parties at their great national conventions made them a plank in their platform, and the friends of the measure looked for the early passage of a bill to secure an end so desirable to us as a great commercial and political power. Yet the whole administration of Mr. Buchanan passed away, and Congress took no action. The arguments of its imperative commercial necessity for the development of our own internal resources, and for the expansion of that great field of enterprise and commerce just opened to our view in Eastern Asia—the great object of securing control of the commerce and exchanges of the world over a route such as ours would be—the military necessity which we then pointed for this great highway, to secure our safety at home and the disgrace and danger of depending upon neighboring powers for our intercourse between distant States in our Government—all these powerful and pressing arguments were made to give way before the jealousies of rival interests, and the measure was delayed till the present Session, when civil war, with all its horrors, has forced upon us positive and practical conviction of the absolute military necessity for this road. We presume that the Senate will pass the bill as it comes from the House, and that this measure may be regarded as now a fixed fact. The bill contains the names of seventy-five persons, of different sections of the country, who, together with five commissioners, to be appointed by the Secretary of the Interior, and all persons who shall or may be associated with them, and their successors, are created into a body corporate and politic, by the name, style and title of the Union Pacific Railroad Company. They are empowered to lay out, locate, construct, furnish, maintain and enjoy a continuous railroad, with the appurtenances, from such point on the 102d meridian of longitude west from Greenwich, to the Western boundary of Nevada Territory. The capital stock

shall consist of one hundred thousand shares of a thousand dollars each. The right of way is granted for the construction of a railroad and telegraph line to the extent of two hundred feet in width on each side, etc. Also, every alternate section of land, to the amount of five alternate sections per mile, on each side of the road, excepting mineral lands, whenever forty consecutive miles of the road are constructed.

The rail and all other iron shall be of American manufacture, of the best quality. A patent shall issue for the lands as well as bonds of one thousand dollars each, payable in thirty years after date, bearing six per centum interest, payable semi-annually, to the amount of sixteen of said bonds per mile for each section of forty miles; to secure the payment of which the company shall give a lien upon the road. The Government shall at all times have the preference of the road for the transportation of mails, troops, munitions of war, supplies, public stores, etc., at fair and reasonable rates of compensation, not to exceed the amount paid by private parties for the same kind of service; and all compensation for services rendered for the Government shall be applied to the payment of the bonds and the interest thereon, until the whole amount is fully paid. The company may also pay the United States, wholly or in part, in the same or other bonds, treasury notes, or other evidences of debt against the United States—to be allowed at par; and after the road is completed, and until the bonds and interest are paid, at least five per centum of the net earnings of the road shall be annually applied to the payment thereof.

The company shall locate, within two years after the passing of this act, the general route. In fixing the point of connection of the main trunk with the Eastern connections, it shall be fixed at the most practicable point for the construction of the Iowa and Missouri branches. The line of railroad and telegraph shall commence at the 102d meridian of longitude, west from Greenwich, at the termination of the Leavenworth, Pawnee & Western Railroad, and the telegraph line to connect therewith as the act provides; thence, running westerly upon the most direct, central and practicable route, through the territories of the United States, to the western boundary of Nevada. It shall there meet and connect with the line of the Central Pacific Railroad Company of California. The bill also extends aid to other companies on certain conditions.

The bill was passed by a vote of 79 yeas to 49 nays, as follows:

YEAS.—Messrs. Aldrich, Allen, Allay, Arnold, Ashley, Beaman, Biddle, Bingham, Blair (Mo.), Blake, Brown (Va.), Campbell, Clements, Colfax, Corning, Covode, Cutler, Davis, Delaplaine, Duell, Dunlap, Edgerton, Eliot, Ely, Fenton, Fessenden, Fisher, Franchot, Frank, Gooch, Goodwin, Granger, Gurley (O.), Haight, Hall, Hooper, Horton, Hutchins, Julian, Kelley, Kellogg (Mich.), Killinger, Lansing, Leary, Lehman, Loomis, Maynard, Men-

zies, Moorhead, Morrill (Me.), Nixon, Noell, Norton, Olio, Perry, Phelps (Cal.), Price, Rice (Mass.), Riddle, Rollins (Mo.), Sargeant, Sedgwick, Shellabarger, Steele (N. Y.), Stern, Train, Trowbridge, Van Horn, Verree, Wallace, Walton (Md.), Ward, Washburne, Webster, Wheeler, Whaley, Wilson, Windom and Worcester.

NAYS.—Messrs. Ancona, Babbitt, Bailey (Pa.), Baker, Blair (Va.), Browne (R. I.), Buffington, Calvert, Chamberlain, Cobb, Fredrick A. Conkling, Cox, Cravens, Crisfield, Crittenden, Diven, Dunn, English, Grider, Harding, Harrison, Johnson, Kellogg (Ill.), Knapp, Law, Lovejoy, McKnight, Mallory, Morrill (Va.), Morris, Noble, Odell, Pike, Porter, Richardson, Robinson, Shanks, Sheffield, Steele (N. J.), Thomas (Mass.), Thomas (Md.), Trumbull, Vallandigham, Voorhees, Wadsworth, Walton (Vt.), White (Ind.), Wickliffe and Woodruff.

It is probably due to the parties whose names have been used as corporators in this company, to say that few of them knew that they would be selected for this responsible and important position. They were selected by members of Congress as being gentlemen of the highest responsibility and representing large railroad interests in the States in which they reside.

We congratulate the country upon the passage of this measure in its present shape. It possesses both the dignity and the prestige of a national measure, and must command the respect and confidence of our people.

STREET RAILWAYS IN ENGLAND.

Mr. Train the enterprising American, who first introduced Street Railways in England, has been very unjustly, and we think very unwisely intertered with in his enterprises. The Street Railroad is one of the greatest advances of modern civilization, but it seems it will have to battle its way through the whole length of English courts, and perhaps through Parliament also, before it can be tolerated in staid old England. We take the following statement of Mr. Train's difficulties from the correspondence of the Philadelphia Enquirer.

He was indicted in connection with the vestryman of Lambeth (who authorized the laying down of the tram-way) for creating and maintaining a nuisance. Numerous witnesses, either with their connection or sympathy with the omnibus interest, or for their anti-American prejudices, were examined for the prosecution, and established, as the published reports show, a very weak case indeed. At the moment the prosecution rested, the foreman of the jury arose in his place and addressed the Judge, declaring that the minds of the jury were fully made up not only from the testimony they had heard, but also from their own personal knowledge of the facts in the case. Instead of rebuking them for presuming to come to a decision before hearing both sides, and especially for daring to bring into the jury-box their own

preconceived prejudices and private opinions, Chief Justice Erle entered into conversation with them, and finally asked the question whether, if Mr. Train's witnesses should testify to an entirely different state of facts proving that the tram way was an unquestionable public convenience, &c., such testimony would have any effect upon their decision? Will it be credited that the foreman of the jury, speaking for the whole body, promptly and decisively answered that it would have no effect whatever. Such however, was the actual fact, and the judge received and the clerk recorded their verdict of guilty, without a word of evidence having been heard from the many respectable witnesses Mr. Train had in attendance.

I have not exaggerated this account in the least. The reports of the trial in all the papers show the facts as I have stated them. And this is a specimen of British justice in the nineteenth century! Mr. Train has stated publicly that, before the trial, he had expended in actual cash, in feeing counsel, and other necessary preparation, no less a sum than six thousand dollars, and now complains, in his peculiarly quaint style, not that he has not had *justice*—for that he says he did not expect—but that they would not even let him have *law*, for the pleasure of indulging in which he had paid so round a price. At all events I doubt if there is a court of any class in our country that would accept the verdict of a jury that refused to listen to the witnesses on both sides.

This is not the only strange case that has recently occurred in the English Courts. At the last Norfolk Assizes Baron Martin decided that the erection of telegraph posts along a turnpike road, even after the sanction of the proper authorities had been obtained, was a public nuisance, the authors of which were criminally indictable on the complaint of any person inconvenienced thereby, and subject to other penalties than the abatement of the nuisance itself. All the telegraph companies in the land are in a state of excitement, and if this decision be sustained, some legislative action will be necessary for their relief.

If the law of England has been rightly construed and administered in these two cases, there is a practical end to telegraphs, and also to street railways, not only in London, but throughout the United Kingdom; for, not only would it be madness to lay down new lines, but those already in existence, until taken up and removed, subject the proprietors at any and every moment to fresh persecutions and penalties, on the ground of perpetrating a contempt of Court.

Mr Train takes the matter very quietly. On the same evening, or the next, he walked into one of the discussion halls, thronged with Englishmen, and expressed his private opinion of the proceedings in most unmistakable terms, and, so overpowering is his oratory,

that he carried his whole audience with him, and took his seat amidst bursts of applause and sympathy.

NEW YORK AND WASHINGTON.

Mr. Wright, from the Committee on Military Affairs, reported the following bill to facilitate the transportation of troops, stores, and mails of the United States between the cities of Washington, Baltimore, Philadelphia, and New York. Increased facilities between those important points we have long felt to be desirable. Especially would it have been so during the past year. Not but the management of the present lines have done all in their power to aid the Government, but it becomes a question of policy as to whether it is safe for the government to be forced to rely exclusively on a single line. The bill however, as reported by Mr. Wright, appears to us as rather indefinite as to locality of route and the extent of aid to be furnished by the government. We have other serious objections. We do not believe it necessary for the government to aid in the construction of railroads through the populous portions of our country, but believe it good policy for it to do so where the government will get a good return in the increased value of its lands. Government or State aid to railroads in the older states, as has been heretofore fully demonstrated, has been simply squandering the public treasure on political hacks and stock-jobbers. A fountain of corruption, from which no good ever flows, and close observation will bear us out in the assertion that those roads that have had the most government aid and patronage have prospered the least, having been managed generally by worn out political nags, who paid more attention to ward and township elections, and the laying of lead pipe, than they did to grading road ways and putting on a durable superstructure:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be, and he is hereby, authorized and directed to guarantee the bonds of the Metropolitan Railroad Company to the amount of two millions of dollars, such bonds to be executed by the said company in such form as the said Secretary shall approve, in sums of not less than one thousand dollars each, payable in thirty years from the date thereof, with interest, at the rate of six per centum, payable semi-annually; but such guarantee is only to be executed by the said Secretary of the Treasury upon the following terms and conditions—that is to say:

First. The said Metropolitan Railroad Company shall execute, in such manner and form as the Secretary of the Treasury shall direct or approve, a mortgage upon their railroad, rolling stock, and other property, conditioned for the punctual payment of the interest on the said bonds as the same from time to time shall become due, and also for the payment of two per centum upon the whole amount of

the principal of the said bonds to the Secretary of the Treasury annually, to constitute a sinking fund for the final redemption of the said bonds, and also for the payment of any part of the principal of said bonds not provided for by said sinking fund, so that in all respects the United States shall be indemnified against its liability for the payment of the said bonds, principal and interest, by reason of said guarantee; such mortgage to be recorded in the same manner as other mortgages affecting real estate are required by law to be recorded.

Second. The said corporation shall enter into a contract with the United States, in such form as shall be approved by the Secretary of War, whereby, in consideration of the facilities for the construction of its road by this act provided, the said corporation shall become bound with the least possible delay to construct its road from Georgetown to Gaithersburg, or to such other point as the Secretary of War shall require, and to connect the same at or near Baltimore with the Philadelphia, Wilmington, and Baltimore railroad, or with the Northern Central railroad, or with such other road or roads as shall form direct and connected lines of railroad by way of Baltimore and Philadelphia to the city of New York, and with roads running through Pennsylvania to western New York and the States lying west of Pennsylvania, and to make such local extensions for their road as shall facilitate the transportation and delivery of military and other freight and passengers as may be required, or in such manner as may be directed by the Secretary of War. The said contract shall provide that, in consideration of the premises, the corporation shall, during the said period of thirty years, transport for the United States upon its road all the munitions of war, subsistence, and military stores, at a price not exceeding four cents per mile per ton and shall also transport during the period aforesaid all soldiers, seamen and other persons being transported by the United States, at a price not exceeding two cents each per mile.

Sec. 2 *And be it further enacted*, That whenever the said corporation shall have complied with the terms and conditions hereinbefore specified, and shall produce to the Secretary of the Treasury satisfactory evidence by affidavit of one or more of its directors, engineers, or other agents, as the Secretary of the Treasury may reasonably require, that the sum of fifty thousand dollars has in good faith been expended in the construction of the road hereinbefore mentioned, he shall guarantee and deliver to the said corporation bonds in the manner specified in the first section of this act to the amount of fifty thousand dollars; and when the said corporation shall in like manner produce evidences that it has expended the further sum of fifty thousand dollars, he shall guarantee and deliver, as aforesaid, bonds to the same amount; and in like manner, as often as the corporation shall expend fifty thousand dollars, and produce satisfactory evidence thereof as aforesaid, an equal amount of bonds shall be guaranteed by the Secretary of the Treasury and delivered to the said corporation, until the whole amount of two millions of dollars have thus been guaranteed and issued.

Sec. 3. *And be it further enacted*, That the said corporation is hereby authorized, under the direction or with the consent of the Secretary of War, to lay down such additional tracks in the District of Columbia as may be necessary to facilitate the distribution of freight or passengers, or the delivery

of the same at the depot of any other road or roads forming direct lines north or south of Washington and Georgetown.

Sec. 4. *And be it further enacted*, That, in case the said corporation shall at any time make default in the payment of the interest upon said bonds, or the amount to be annually contributed towards a sinking fund for the final redemption of said bonds, or in the payment of any balance which may remain unpaid upon the said bonds when the principal thereof becomes due, it shall be lawful for the Secretary of the Treasury to sell the road, with all the other mortgaged property at auction, to the highest bidder, first giving three months' notice of such sale by advertisement at least once in each week in one or more public news-papers printed in the cities of Washington and Baltimore, and in such other news papers as he may deem expedient, unless before the day of such sale the said corporation shall redeem the same by paying the amount due; and upon such sale to purchase the said road and other property for the use and benefit of the United States, subject to such disposition thereof as Congress may thereafter direct.

Sec. 5. *And be it further enacted*, That it shall be lawful for the Secretary of War, whenever the same shall be required to facilitate military or postal service, to direct a line of double track either to Baltimore or by the most practicable line of connection with existing roads through to New York to be constructed; and he is hereby authorized and directed to contract with the said Metropolitan Railroad Company to make such connections as will form a through line of unbroken track from Washington to New York, and also the said additional or double track upon the same terms and conditions for the transportation of freight and persons being transported by the United States as is hereinbefore provided; and the said contract shall further provide that the departure and arrival of the trains carrying the United States mails shall be at such hours as the Postmaster General may from time to time designate; and if the railroads now existing and hereby intended to be connected so as to form a through working road for military, postal and other purposes, shall refuse to permit, or form such connections on terms reasonable and satisfactory to the United States, and approved by the Secretary of War the said Metropolitan Railroad Company shall form such other connections or extensions as shall secure the rapid and earliest completion of a through line of double track between the cities of Washington and New York. And the Secretary of the Treasury is hereby further authorized and directed to guarantee and issue the bonds of the said company, in the same form and manner, and with the same restrictions and provisions for securing and indemnifying the United States against their liability by reason of the said guarantee, as is hereinbefore provided, and to an amount equal to the said construction, as shall be shown by the books of account of said company, verified by the affidavit of one or more of its directors, engineers, or other agents, as the Secretary of the Treasury may reasonably require, as hereinbefore provided.

Sec. 6. *And be it further enacted*, That the rate of fare for through passengers upon the said roads, when connected under or by the provisions of this act, or extended thereby, shall not exceed two and a half cents per mile on the line or lines between Washington, Baltimore, Philadelphia, and New York; nor shall the full through price, on the shortest line, exceed the sum of five and a half

dollars on each passenger proceeding directly through; and the rates for way passengers shall not exceed the rate of three cents per mile for an distance they may be carried upon the said road or roads: *Provided*, That if extra or additional cars, superior in convenience to those now generally in use, and having separate or family compartments therein, shall be placed upon the line, an additional rate not exceeding one cent per mile, upon the rates hereinbefore provided, may be charged for such through and way passengers as may prefer and use the said superior or family cars.

ELMIRA & WILLIAMSPORT RAILROAD COMPANY.

The annual report of the Stock and Bondholders of the Elmira and Williamsport Railroad Company was held in Philadelphia, May 5th.

The following is an abstract of the annual report of the President.

Receipts from passengers, including troops	\$100,615 54
Receipts from freight on mdse	102,311 98
Receipts from freight on coal	66,527 43
Receipts from U. S. mail	11,550 00
Receipts from miscellaneous sources.	26,491 07
	\$307,496 02

The ordinary expenditures for operating the road have been 160,146 99

Leaving a profit of	\$147,349 03
Which has been appropriated as follows:	
40,000 cross-ties on the track	\$10,000 00
Rebuilding bridges	7,200 00
Deposits for Mortgage Bondholders	70,000 00
Deposits for Chattel Bondholders	20,168 00
Interest on mortgage on Elmira Basin	3,500 00
Interest on scrip, labor and material debt, &c.,	5,895 47
Reduction of scrip, labor and material debt, &c	30,585 56
	147,349 03

Finding that the net receipts of the year would prove more than sufficient to provide for the payment to the mortgage bond holders, and for the lease of the chattels, as well as for the liquidation of all the scrip and debt of the old company maturing in the course of the year, which had been assumed by order of the Supreme Court, in the re-organization under Act of Assembly, it was deemed most conducive to the future interests of both bond and stockholders to spend a large portion of this surplus in extraordinary renewals of the roadway, bridges and other structures.

Two of the most important bridges on the road, those at Trout Run and Ralston, have been completely rebuilt during the year, and the bridge at Dunning's Dam almost entirely renewed. These extensive renewals were gradually authorized and completed from time to time as it became apparent that the surplus income of the Company over the amount required for the deposits and the maturing obligations justified such an expenditure.

The interest on the mortgaged bonds of the

Company has been punctually paid on the 1st of January and of July, and on the 1st of February and of August the Trustees of the chattels have paid to the holders of the bonds of the old Company their respective proportions of the amount required from the Company under the stipulated lease of the chattels. The interest on the Elmira basin property, \$3,500, has also been paid semi annually to the holders of the mortgage on that estate. This property consists of the large basin and surrounding grounds at Elmira, comprising fifty-five acres and fifteen hundred feet of canal wharfage, all of which are necessary for the transaction of the large and increasing coal business of this Company, and for the use of which an adequate equivalent is allowed by the Erie Railway Company in the free use of a mile of their road and bridge at Elmira.

The remainder of the income of the year has been appropriated towards the extinguishment of that portion of the debt of the old Company assumed by this Company under the agreement of reorganization. On this account \$32,513.64 have been expended during the year.

The report further states that should the business of the road show no further improvement in the next two years, the net income, at the rate of the past year's earning, will suffice to discharge, by July, 1863, the balance of the scrip, labor and material debt, and that for the purchase of tools and patterns, leaving a surplus in the next fiscal year fairly applicable to a dividend to the preferred stockholders.

The Managers believe that the business of the road will steadily prosper, and its income gradually increase until all the interests of the Company shall be adequately remunerated.

The different connections of the road are then referred to at length, and their importance duly set forth.

A full account of the effects on the trade and travel of the Elmira Company, resulting from the various new openings North and South which had taken place within two years past, was given. Northwest the Buffalo, New York & Erie Company has made its line of connection perfect between Buffalo and Elmira, affording from Buffalo to Washington, a line two hundred miles nearer than by way of New York, over which the trade and travel are constantly increasing, and on the opening of a Washington office by the joint lines, are expected still further to increase.

Southward the Northern Central Railroad has, within the past year, been operated with great energy; and by the controlling influence of the Pennsylvania Central Company, in its management, and by the lease of the Philadelphia & Erie Company by the Pennsylvania Railroad Company, the latter Company is brought at Williamsport to the very doors of the Elmira Company.

Moreover, by the Lebanon Valley & Reading road, as well as by the Pennsylvania road,

another first-class Philadelphia route is secured, in the event of any unforeseen contingency interfering with the present Catawissa connection. And by the Lebanon Valley and East Pennsylvania route an equally favorable New York route is open to us in that event. Moreover, the Lackawanna & Bloomsburg road being finished to Northumberland gives the Elmira Company access, independent of the Catawissa Company, to Rupert, Danville Wilkesbarre, and the whole Wyoming coal region.

Hence the Board feel assured, beyond any possibility of accident, of a first-class connection with the eastward markets, and with the interior coal, iron and agricultural regions of Pennsylvania.

The coal trade, which has largely increased during the year, is also alluded to at length.

The following gentlemen were elected directors and officers for the ensuing year:

Thomas Kimber, President. Managers—Ellis Lewis, John Farnum, Wm. D. Lewis, Robert J. Mercer, Theodore F. Randolph, Alexander S. Divin.

BREECH-LOADING CANNON.

On May 3d, a trial of a new breech-loading cannon was made at the navy yard in Washington, in presence of the President and a large number of spectators, many of whom were gentlemen of experience in the use of ordnance. The breech of this cannon is bored transversely, and a revolving cylinder is inserted in this circular chamber. This cylinder has a chamber corresponding to the bore of the gun, and is moved by a short lever. When thrown up it exposes the chamber, and the load of powder and ball is deposited in the cavity. A movement of the lever then throws the chamber thus charged down into the line of the bore, and it is then exploded by the cap, which, in this gun, is at the extreme end of the breech, and in line with the center of the bore. The test at the navy yard demonstrated, that with this gun it was an easy matter to fire from 10 to 15 discharges per minute with but three gunners; that an ordinary charge of powder would project a large six-pound ball fully half a mile further than from an ordinary muzzle-loading cannon; and that from the construction and arrangement of the gun there was no recoil under the discharge.

The men employed in the test were all unused to the gun, and had the misfortune to cut a cartridge in two, and thus get the charge of powder in the revolving cylinder, which, from a defect in its construction, was allowed to leave space enough to become thus clogged. The test therefore showed the defects of manufacture in this first cannon, but was a beautiful and successful illustration of the principle. We regard the improvements herein made practical as the first actual step taken in the construction of breech loading cannon. The inventor is Mr. Jas. C. C. Holensshade, of Cincinnati.

HANNIBAL AND ST. JOSEPH RAILROAD.—The following is the annual statement of the earnings of this road for three years past:

Earnings 1859.....	\$ 715,874
“ 1860.....	1,053,917
“ 1861, exclusive of Government service.....	523,492
RECEIPTS OF 1862.	

January.....	\$32,831 13
February.....	35,850 91
March.....	39,095 29
3 weeks in April.....	31,763 29

Exclusive of Government service, about \$15,000 per month.

CAPT. JOHN ERICSSON.

Capt. John Ericsson is a true Scandinavian, having been born in 1803 in the Province of Vermeland among the iron mountains of Sweden. His father was a mining proprietor, so that in his youth he had ample opportunities to watch the operations of machinery.

When quite young he exhibited a strong predilection for scientific and mechanical pursuits; he was an expert draughtsman, and made several philosophical instruments and miniature machines before he was eleven years of age. The celebrated Count Platen, who was a distinguished civil engineer and an intimate friend of Bernadotte the king of Sweden, having heard of Ericsson's precocious mechanical talents, went to see him. After carefully examining the various plans and drawings which the youth exhibited on this occasion, the Count handed them back to him, simply observing, in an impressive manner, "Continue as you have commenced, and you will one day produce something extraordinary." The few words of encouragement from so distinguished a personage sunk deep into the mind of the young mechanic, and confirmed him in the choice of that career upon which he had entered.

Soon after, this young Ericsson was entered as a cadet in the corps of Swedish engineers, and at the age of twelve years he was appointed an engineer under Count Platen, in the construction of the Grand Ship Canal, which unites the North Sea with the Baltic. This great canal was chiefly built by the labor of the soldiers of the army, and young Ericsson was required to set out the work for about six hundred of them. As the work on this canal was only conducted during the summer months, he was occupied in winter with his pen and pencil in devising plans and making drawings. There are many important works on the canal constructed after drawings made by Ericsson at this early age.

He afterward entered the Swedish army as a lieutenant at seventeen years of age, rose to be captain and was chosen as a military surveyor of the North Highlands of Sweden. There are in the government archives at Stockholm, maps executed by his own hands, of fifty square miles of territory.

While thus occupied, his mind was also engaged on his most favorite topic—mechanical invention, especially the power of highly heated gases derived directly from combustion. The Colonel of his regiment was his firm friend, and was captivated with experiments he made on a small engine operated with the heated products of Swedish pine wood as a substitute for steam. It was supposed that England was the most favorable country for the development of this new motor, and liberty was obtained from the king to

visit London, where Ericsson arrived in May, 1826. Here he fixed his abode, and drew upon the resources of his mechanical genius for his support. He soon brought out a number of new inventions, especially an improved boiler on the principle of *artificial draft*, for the building of which he subsequently associated himself with Mr. John Braithwaite. While thus engaged, in 1829, the Liverpool & Manchester Railway Company offered a prize for the best locomotive engine, to be tested on the small portion of the railway then completed. Ericsson, not willing to allow this occasion to escape him, immediately set to work, planned the engine, executed the working drawings, and caused the patterns to be made, and the whole machine was completed within seven weeks. The day of trial arrived. Three engines entered the list for the prize, namely, the *Rocket*, by George Stephenson; the *Novelty*, by Ericsson, and the *Sanspareil*, by Timothy Hackworth. This was the most important railway trial that ever took place. The *Novelty* was furnished with a bellows draft and winding flue boiler. With its tank it weighed only 3 ton 17 cwt., while the *Rocket* weighed, with tank, 7 tons 9 cwt. The latter was the only engine which fulfilled the conditions required, but the *London Examiner* of Oct. 6, 1829, describing the trial, stated that the *Novelty* attracted universal admiration on account of its beauty and the work which such a small engine performed. It darted along at the rate of 30 miles per hour, and it drew a load of 28.5 tons—its own weight included—at an average speed of 8 miles per hour.

The greatest improvements ever applied to steamships of war is due, we understand, to Capt. Ericsson—we mean the screw propeller and the arranging of all the machinery under the water line. The screw is an old device, but it had been laid aside as an entire failure, until he resuscitated it and proved its utility on the small boat on the river Thames, which the jolly watermen called *The Flying Devil*. He invited the Lords of the British Admiralty to take a trip in this little vessel, for the purpose of showing them how the screw operated, and to give an explanation of the machinery, and the advantages of placing it below the water line, out of the reach of shot. The Admiralty authorities took the trip, but Sir William Simonds, then Chief Naval Constructor, concluded the interview by asserting it was impossible to steer a vessel having a screw placed at the stern.

Such was the bright conclusion arrived at twenty six years ago, respecting the merits of the screw by the leading naval constructor in England. The only steam vessels then used in the British Navy had paddle wheels, and a considerable portion of their machinery was above the water line. Not a paddle wheel steamer has been built for that navy in fifteen years. There were two Americans who had examined Captain Ericsson's drawings, and had taken a trip on his little propeller, and they appreciated its merits. One of these gentlemen was Francis B. Ogden, Esq., our Consul at Liverpool; the other, Commodore Robert F. Stockton, U. S. N. Through the influence of the latter, Capt. Ericsson came to the United States in 1839, and in 1841 became engaged with him in building the U. S. steam frigate *Princeton*—the first successful propeller war vessel ever constructed for any government—with all its machinery under the water line. Bennet Woodcroft, Esq., of the British Patent Office, in his treatise on screw propulsion, gives Capt. Ericsson the praise which he merits, and in France he is called the father of screw propulsion applied to war

vessels, as he designed the *Pomone*, the first screw vessel in the French navy.—*Scientific American*.

NORTHERN COMMERCE INDEPENDENT OF THE WAR.

The Northern States have suffered from the present war as men always do when a malicious or unruly neighbor threatens to burn their buildings, steal their property or take their lives. It may become necessary in such case to maintain a large police force, at great expense. This the Northern States are doing, but thus far they know of the effects of civil war only by report. It does not rage in their borders. The mischief-maker is either incarcerated, or is within the limits we have prescribed to him. The articulations of Northern society and Northern industry are as free and undisturbed as ever. Twenty millions of people seek their nightly repose with the same sense of security as if the war was raging in China. To them it is, in all its attributes, a war on foreign soil and entirely hemmed in from the sea. Both our domestic and foreign commerce have had a season of unwonted activity. The traffic and earnings of our railroads and canals, that bear the most intimate relations to the great routes of our internal commerce, are largely in excess of those of 1860. The contrast is so well stated in the weekly circular of an enterprising house in this city, a portion of which will be found in our commercial columns, that we make free to introduce some of the statements and conclusions it furnishes. From it, it appears that the earnings for the past year of sixteen railway companies, the same that are accustomed to report them monthly, with the earnings of the Erie Canal, have been \$29,543,707, against \$26,242,568 for 1860, showing an absolute gain of \$3,301,139, or a rate equal to 13 per cent, for the year of rebellion over one of peace and remarkable prosperity. The activity at the great centres of trade corresponds with that on our public works. The deliveries of grain at Chicago, the past year, have been 33,214,294 bushels, against 22,866,088 bushels for a corresponding period for 1860, and 9,735,582 bushels for 1859. The deliveries at tide water, through the Erie Canal for 1861, have been 31,304,049 bushels, against 22,632,835 bushels for a similar period for 1860, and 5,534,388 bushels for 1859. The exports of breadstuffs to England and the continent have been equivalent to 54,682,639 bushels for 1861, and 11,192,799 bushels for 1860, and 1,644,662 bushels for 1859. The condition of the foreign trade of the country is anomalous and beyond example. The imports, exclusive of specie, at the port of New York alone, since the 1st of July, 1861, pared with those for a similar period 1860, have fallen off \$78,445,007; the imports for last year being \$175,292,275; for the present \$97,847,208. The exports, exclusive of specie, in the same time, have gone from \$63,848,917, in 1860, to \$91,216,351 the present year. The receipts of gold from Europe and California, since January 1st, 1861, have been \$66,739,000, while the exports have been only \$3,260,000, leaving a balance in our favor, for the first eight months of the year, of \$63,478,000. This is a most remarkable exhibition for a nation that foreigners are assuring themselves, and trying to convince us, is effete, on the verge of annihilation, whose only salvation is a reconstruction upon the models of the despotism of the old world, and the *London Times* and *Economist* favor us with their views on this remarkable exhibit.—*New York Times*.

PROPOSED AMALGAMATION OF CANADIAN RAILWAYS.

Recent London papers allude to a project for amalgamating three of the railways in the Canadian provinces. We are not informed of the principles or details of the proposed measure, but it is said that they have been so far determined on, as to enable the companies in question to draw up a preliminary agreement, the effect of which has been to raise the market value of the shares of the respective companies from six to ten per cent. in a few days. Two of these companies—the Grand Trunk and the Great Western—have recently undergone the scrutiny of investigations; the former by a commission issued by the provincial Government, and the latter by a committee of London shareholders. Although both investigations resulted in voluminous reports, not altogether very flattering to either of them, very little stress seems to have been laid on the subject of competition. Both reports, indeed, condemn the folly which has characterized the two lines in question, in persisting in the carrying of through freight at non-paying rates. But it does not appear from any evidence adduced that this has been the result of competition between the supposed Canadian rivals. The reports of the Great Western may be cited to prove that this competition has rather been with the lines south of Lake Erie and with the lake itself. An agreement has been in existence between the two, for two years or more, regulating the tariff chargeable on freight and passengers, and no complaint appears to be made that this tariff arrangement has been violated on either side. To experienced railway managers in this country, having no other information than that contained in the official statements and reports referred to, there does not seem to be sufficient reason for taking so important a step as that of placing three lines of railway, traversing tracts of country differing widely from each other, and having apparently different missions to perform, under one management. Besides, 1,500 miles of railway may be reasonably regarded as too much for any manager to properly direct.

What, then, is the reason for amalgamation? Or, putting the question more precisely, what is the object aimed at, and what is the pretense urged in its justification?

Primarily, no doubt, the scheme originated with the Grand Trunk. Mr. Watkin, whom the English proprietors sent to Canada to study its disease and prescribe a remedy, hit upon this expedient of amalgamation, that the Great Western might be metamorphosed from a formidable rival to a profitable tributary. But what temptation is held out to induce the shareholders of the Great Western to tack the fortunes of their most valuable enterprise to those of the bankrupt, helpless and disorganized Grand Trunk? The answer to this inquiry involves matters of the highest interest to some of our own lines. For it is known that the amalgamation project rests on the utterly untenable assumption that such a combination will enable the Canadian lines to drive the American routes south of Lake Erie out of the through freight market of the West. The idea suggested to the English stockholders is, that such a combination will enable the Canadian railways to divert a preponderance of the freight business, north of Lake Ontario to Quebec, Portland, and Boston. This, too, notwithstanding the fact that the Commissioners appointed by the Canadian Government have clearly pointed out the folly and wickedness of squandering, year

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	R. of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	48		\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.	380		13,111,800	10,781,833	566,070	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do										"	2,500,000	6		1885	
do do										"	700,000	6		1880	
do do										"	1,125,500	6		1875	
do Washington Branch.....	Md.	30		1,650,000						"	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind.	118		1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7		1866	
do do										2d "	160,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	121	68	1,950,950	1,049,000	27,545	911,019	492,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,860	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	90		3,98,400	8,820,000		1,997,063	733,950	Dec. 31, 1860	1st Mortgage.....	450,000	6		1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,438	597,633	71,350	Aug. 1, 1859	1st Mortgage.....	800,000	7		1864	
do do										2d "	800,000	7		1865	
do do										3d "	950,000	7		1865	
do do										4th " S. F.	1,363,800	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7		1865 & 1870	
do do										2d "	600,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,400,000	7			
do do										2d "	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						3d "	1,000,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	2d "	200,000				
do do										Pref 1st Mor. & S. F.	1,250,000	7	80	Feb. & Aug.	
do do										Gen'l 1st Mortgage.	3,600,000	7	41	Feb. & Aug.	
Chicago and Rock Island.....	Ills.	55	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	2d "	2,000,000	6	11	May 1	
Chicago, Burlington and Quincy.....	"	61	138	4,689,340	4,814,515		1,514,428	761,830		1st Mortgage.....	2,000,000	7		1870	
do do										Cons. 2d Mort. S. F.	2,172,000	8	99	1863	
do do										" 2d " S. F.	833,000	8		1890	
do do										1st Mor. Chi. & Aur.	390,000	7		1867	
do do										2d "	303,490	7		1869	
do do										1st "Cent. Mil. Tract	391,000	7		1864	
do do										2d "	245,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
Cincinnati, Hamilton and Dayton.....	Ohio.	60		2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000			1867	
do do										2d "	950,000	7		1880	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
Cleveland and Mahoning	Ohio.	68		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,500	7			
do do										1st Mortgage.....	830,000	7			
do do										2d "	490,000	7			
Cleveland and Pittsburgh.....	Ohio & Pa.	18	196	In hands of Receiver.	4,918,325	653,821				3d "	344,100	8			
do do										1st Mortgage M. L.	800,000	7	13	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7		1873	
do do										3d 2d Ex.....	1,165,000	7		1865	
Cleveland and Toledo.....	Ohio.	46	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	4th 3d Ex.....	1,154,100	7			
do do										1st Mor. Jun. 1st Div.	359,000	7		1867	
do do										2d " 2d Div.	263,000	7		1872	
do do										3d "	265,000	7		1862	
do do										1st " Tol. Nor. & Clev	521,000	7		1863	
do do										2d " "	293,300	7		1861	
do do										Junction Income.....	44,500	7		1862	
do do										C. & T. Income.....	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	109	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"		98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7		1861	
do do										2d "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	54		1,490,000	290,700	50,500	See L. Miami.			Dividend.....	272,700			1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000		292,267	375,002		1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666				212,107	Mar. 31, 1860.	2d "	2,212,000	8			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7		1875	
Detroit and Milwaukee.....	Mich.	186		No report						2d "	2,500,000	7		1866	
do do										3d "	1,000,900	8			
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		96,061	1,219,100	249,868	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.											
Galena and Chicago Union.....	Ills.	69	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	400,000				
do do										2d "	18,000				
Great Western.....	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage.....	1,993,000				
do do										2d "	1,320,000				
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report	75,000	63,141	13,573		1st Mortgage W. D.	1,041,000	10			
Greenville and Miami.....	Ohio.	32		300,000	473,000					2d " E. D.	1,350,000	7			
Hannibal and St. Joseph.....	Mo.	206		1,041,000	10,554,000	220,336	996,907	512,933	Sept. 1, 1860.	Land Mortgage.....	5,000,000				
do do										Mortgage Conv.....	1,354,000				
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	4,000,000	6		1873	
Hudson River.....	N. Y.	352	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	2,000,000	7		1869 & 1870	
do do										2d "	1,840,000	7		1870	
do do										3d "	38,000	7		1875	
Illinois Central.....	Ills.	65	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	12,885,000	7		1868	
do do										Construction.....	4,115,000	6		1875	
do do										Debentures.....	42,740				
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	60,000				
do do										2d "	578,000	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		Income.....	28,700	7			
do do										1st Mortgage.....	500,000			1866	
do do										2d "	400,000				
Indianapolis, Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort.....	200,000	7			
do do										1st Mortgage.....	649,854	7			
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d "	314,000				
Iowa.....	Ohio.	13		118,865	50,000		No report								

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Fund- ed Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int. Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st	249,000	7	1861	
do										2d	392,000	7	1873	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,632	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st	260,000	7		
do										2d " Conv.	1,000,000	7		
do										3d "	600,000	7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiv er.						1st Mortgage E. D. ...	500,000			
do										2d " E. D.	1,000,000	12		
do										1st Land Grant W D ...	4,000,000			
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report							
Lexington and Frankfort.....	Ky.	29		514,433	130,000		105,944	43,267	June 30, 1861	1st Mortgage.....	130,000	6		
Little Miami.....	Ohio.	65					1,330,050	529,981	Jan. 1, 1862	1st Mortgage.....	1,300,000	6	1863	
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		245,910	98,679	June 30, 1861	City Loan.....	174,000			
do										1st Mortgage.....	248,000			
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st Mortgage.....	2,000,000	7		
do										1st " Lebanon Br.	400,000			
do										1st " Memphis Br.	500,000			
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,225,300	87,969	230,563	99,000	Dec. 31, 1860.	1st Mortgage.....	600,000	7	1861	
Marietta and Cincinnati.....	Ohio.	203		8,561,213	190,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv. ...	2,500,000	7	1868	
do										2d "	2,000,000	7		
do										3d "	1,500,000	7		
do										Sterling Income.....	333,000	4		
Michigan Central.....	Mich.	55½	284	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	Domestic 928,617		6	1872	
do										1st Mortgage Sterling ...	467,483	8	1869	
do										1st " Conv.	500,100	100		
do										1st " unconv.	250,000	8	1860	
do										1st " Dollar Conv.	2,500,000	8	1869	
do										1st " S. F. Conv.	4,153,000	8	1862	
Michigan South'n & North'n Indiana	Mich.&	24½	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. So.	991,100	8	1860	
do										" Nor. Ind.	985,000	88½	1861	
do										" Goshen Line.	1,168,000	88½	1868	
do										S. F Toledo 2,500,000		85	1885	
do										2d Mortgage 2,465,000		73	1877	
Ilwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,305	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d "	200,000	8		
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8		
do										2d "	600,000	8		
Milwaukee and Prairie du Chien....	Wis.	27½	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	1891	
do														
Mississippi and Missouri.....	Iowa,	55		No report						1st Mortgage Conv. ...	1,000,000	7		
do										2d " S. F.	400,000	8		
do										Oskaloosa Div.	1,425,000	7		
do										Land Grant.....	7,000,000	7		
New Jersey.....	N. J.	33	34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000			
New Jersey Central.....	N. J.	64	64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.					
New York and Erie Pref.....	N. Y.	61½		Sold under mortgage			5,590,916	1,979,402	Sept. 30, 1860	1st Mortgage.....	3,000,000	106		
do		37½								2d "	4,000,000	7		
do										3d "	600,000	96		
do										4th "	4,900,000	80½		
do										5th "	1,792,500	76		
New York and Harlem Pref	Conn.	31½	138	5,717,190	6,055,752	.....	1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	1873	
do common		13								2d "	1,000,000	7	1864	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7	Dec 1, 1866	
do											972,000	6	Oct. 1, 1875	
New York Central.....	N. Y.	83½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H. ...	7,925,000	6	98	Oct. 15, 1863
do										Mortgage.....	3,000,000	7	104½	June 15, 1864
Northern Central.....	Md.		138	2,260,000	5,890,300	537,926	1,012,103	283,627	Dec. 31, 1860.	Construction.....	2,006,300	6		1865
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,450,000	6		
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500			
do										3d "	316,995			
do										Construction.....	4,637,920			
do										Income.....	3,591,185			
Ohio and Mississippi, Western Div....	Ills.	148		.....	3,292,403		No report							
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000	6	38	
do										" S. W.	2,800,000	6		
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	Construction.....	4,500,000	6		
do										1st Mortgage Conv.	4,900,000	6	1888	
do										2d "	2,319,000	6	1875	
do										State " Sterling.	1,937,440	6	1875	
do										State Works.	7,300,000	5		
Peru and Indianapolis.....	Ind.	74		1,100,090	820,000	80,000	No report			1st Mortgage.....	2,300,000	6	1894	
Philadelphia, Wil. and Baltimore....	Del.	98		5,600,000	2,300,000		1,236,397	471,712	Oct. 31, 1860.	Improvement.....	119,000	6	1863	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	1st Mort. O. & P.	1,000,000	7	1865	
do										2d "	750,000	7	1866	
do										1st " O. & L.	1,000,000	7	1872	
do										2d "	380,000	7	1873	
Pittsburgh and Connellsville.....	Pa.	49		1,755,886	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000			
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.					
do														
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,000	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10	1856	
do										"	997,000	7	1866	
do										"	1,000,000	7	1875	
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7	1886	
do														
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000	7		
do										2d "	430,000			
do										1st Mortgage.....	1,500,000	7	1870	
do										2d "	900,000	7	1865	
Steuensville and Indiana..	Ohio.			No report						1st Mortgage Conv. ...	1,000,000	7	75	1862
do										2d " Conv.	2,000,000	7	1868 & 1870	
do										1st " Bel. & Ill.	517,000	7	1873	
do										1st Mortgage.....	200,000	7	1866	
Terre Haute and Richmond.....	Ind.	100	73	1,341,450	230,000	none.	377,002	216,183	Dec. 1, 1861.	1st Mortgage.....	3,400,000	7	Aug. 1, 1865	
do										2d "	2,500,000	7	Nov. 1, 1878	
do										Mort. Coupons.....	96,049	7	1860 to 1865	
Toledo, Wabash and Western.....	Ohio & Ind	54	243	2,123,600	5,996,049	52,389	233,546							

after year, the shareholders' money in carrying freight from Detroit to Boston at a dead loss to the Grand Trunk Company.

How can the Great Western be made to serve two masters? Its strength lies in the faithful carrying out of the principles on which it was predicated, namely, as a line forming a link in the shortest chain of railway communication between the great granaries of the West and the commercial metropolis of this continent, and at the same time traversing the best settled part of the peninsula of Western Canada. Can it better itself by abandoning its original position, and entering into a new connection as a link—or, rather, as a second and useless link—in the grand trunk chain of railway, which leads to a second or third rate seaport town? Is it not clear that under any scheme of amalgamation, the Great Western must become subordinate to the Grand Trunk, whose interests and objects are at variance with the New York Central, to which the Great Western owes its chief through freight business for several months in the year, and its through passenger traffic all the year round? It is true that such an arrangement in Canada as that which the Grand Trunk and the Great Western ask the provincial Parliament to sanction might meanwhile give the New York Central some inconvenience, and perhaps cause some loss. But the New York Central has the means of crushing its present ally the moment it becomes a competitor or an enemy. All that is needed to do this, is to put on its fleet of splendid steamers, now idle and rotting in the Detroit river, and to form closer relations with the south shore lines. Such a policy, forced on the New York lines, will bankrupt the entire Canadian property in a single year.

Besides, what can be gained by this amalgamation scheme that is not already secured under traffic agreements, or the violation of which nobody complains? Can a barrel of flour be carried one cent cheaper from Detroit to Boston than at present, or can Boston be made to change positions with New York? A little reflection on the part of the English managers of Canadian lines ought to convince them of the soundness of the views set forth by the Canadian government commissioners as to the impolicy of competing for through freight. The relative distances between Detroit and Boston and Detroit and New York should be sufficient to determine the question. They are respectively 955 and 675 miles, using the Great Western as a link in both cases.

There are other circumstances to be taken into account. One of these is a very important element in the question of freight traffic: we mean the destination. Where the market is ruled by a foreign demand, this is usually determined by the place of supplying the funds to move the produce, or goods, from the grower or manufacturer to the consumer. On this continent, it happens that New York is the financial and commercial center; the produce dealer raises his funds in Wall street, and wants his flour and grain to be delivered in New York or Brooklyn, and not in Boston. If it be for foreign export, and he can get it delivered, say, twenty-five per cent. cheaper (for freight) at the latter place, he may be tempted to order it there, and will send his ship around for it. It will therefore be seen that the Canadian lines, though two hundred and eighty miles longer to Boston, can only get business by underselling the American route. For instance, the Great Western has been carrying flour during the winter, over the Grand Trunk at lower rates than it could obtain by carrying to the Suspension Bridge.

We find the motive for this suicidal proceeding in a desire to swell the gross receipts of the two lines, without producing any corresponding advantage to the shareholders—or rather, at a positive loss to them.

The average cost of moving freight, to say nothing about profit, has been found to be about one and a quarter cent a ton per mile, on the lines of this country. Taking this rule, it is clear that the cost of transporting a ton of flour from Detroit to Boston (955 miles) will be about \$12; and as the gross weight of a barrel of flour is 224 pounds, nine barrels may be reckoned to the ton. So that the cost to the Canadian companies, in wear and tear of the permanent way and rolling stock, and for wages, fuel, etc., of carrying a barrel of flour from the one point to the other amounts to \$1 33. Nevertheless the Canadian companies have been carrying all winter at rates varying from 80 cents to \$1 10. We again ask, how will amalgamation better their condition?—*Railway Review.*

(Continued from last week.)

LONDON GAS WORKS.

The cast iron mouth pieces, upon which the the sockets for the ascension pipes for conducting away the gas are cast, are generally fastened to the ends of clay retorts by bolts, which project from the clay through holes left for that purpose when the retort is moulded. Mr. Hughes, in his little work on gas making, says: "In preparing the end of the retort to have the mouth piece attached, the end surface is chipped and notched with grooves like the surface of a millstone, in order to retain more firmly the cement filled in between the retort and the flange of the mouth piece. The cement used is the ordinary iron cement, compounded without sulphur, and mixed with an equal quantity of fire clay. This mixture, made into the consistence of mortar, is spread evenly over the joint; the mouth piece is then attached and screwed up, the recesses in which the bolts are sunk being filled with the same mixture."

For fire brick retorts, socket mouth pieces enclosing the end of the retort are used at the Chartered Gas Company's works, and at those of the South Metropolitan—that is to say, the end of the retort extends into a socket 4 in. or 5 in. in depth, cast upon the back of the mouth piece, and generally three or more mouth pieces with these sockets are cast together upon a single plate, which is held, by tie bolts, against the brickwork. At some other gasworks, where brick retorts are used, the mouth pieces are made without sockets. The sockets would, perhaps, be found advantageous, even with ordinary clay retorts. Cases have been known where the expansion of the ascension pipes (through which the gas rises from the retort) has been such as to lift the hydraulic main off its supports. In such cases a great strain must necessarily be thrown upon the mouth piece joints, where a socket would afford great resistance against starting the bolts.

The mouth pieces, and thus the ends of the retorts, are closed by iron lids, either cast or wrought, the latter being preferable and in extensive use. Through a couple of ears, one on each side of the mouth piece, two studs project outward, and through two slots, one in the outer end of each stud, a cross bar is so placed as to be capable of ready removal. By a stout screw passing through the cross bar and pressing against the centre of the lid,

the latter, previously luted with wet lime, is made gas tight.

We may now stop to examine the working of the retorts, presuming that everything is in readiness, they are first very gradually heated for a number of hours, this process sometimes lasting for a whole day. The coal having been wheeled into the retort house, on both sides of the great main range of benches, so that the men can charge simultaneously at both ends of the retorts, the charging scoops are first filled. The scoop is of sheet iron, not far from 10 ft. long, and of a size convenient for being run into and turned over in the retort, by means of an iron stalk with cross handles at the outer end of the scoop. About half of the coal intended to be charged at one mouth piece is shovelled into the scoop, which is then lifted, run into the retort, there turned over and immediately withdrawn, leaving the coal behind. A second scoopful being charged, the lid previously served around the edges with wet lime, is applied—the cross bar having been previously slipped into its place—and by means of the tightening screw, a close joint is quickly made. The other end of the retort being similarly and simultaneously charged, the coal already in course of decomposition, sends off its gas into the hydraulic main above.

The amount of coal charged at a time, at one mouth piece, varies in the different London gasworks from 170 lb to 280 lb, or from 340 lb to a quarter of a ton to one long retort. From 196 lb (1½ cwt) to 224 lb is the more usual charge for 16 in. retorts. Thus, when charged every six hours, the carbonizing power of the 340 long retorts at the Horseferry road station is about 360 tons, or possibly 320 tons a day, and the 350 retorts (700 mouth pieces) at the Goswell street and Curtain road works will get through 300 tons a day. With nearly 600 long retorts at the Pancras station of the Imperial Company, about 500 tons can be carbonized daily, and we believe that, at the Hackney road station of the same company, upwards of 425 tons of coal have gone through 386 retorts in a day of 24 hours. At the London Gasworks, too, we understand that about 300 tons of coal have been carbonized in one day, in 250 retorts. At the City Gasworks, and at the Commercial works, 1700 tons a week is about the maximum carbonizing power of each, although the former has 940 and the latter but 540 mouth pieces. At the Vauxhall station of the Phoenix Company, at the Great Central, and at the Equitable works, the maximum is about 1100 tons each every week. In every case the retorts are charged every six hours. At the Western Gasworks, however, where only canal gas is made, a considerable number of the retorts are worked on four hours charges.

For working the retorts it is customary to divide the men into gangs of five each. Three of these, who attend the retorts, are called carbonizers or stokers, a fourth keeps up the fires in the furnaces, and the remaining man wheels the coal and coke on a barrow. To one of these gangs from 42 to 56 mouth pieces are allotted, 50 being the number at the Goswell street works, and 56 at the Crystal Palace district works. This allotment of mouth pieces is not always in the same range of benches, and it sometimes happens that the men have to go from one retort house to another to serve their full number of retorts. The men work 12 hours at a shift, for seven days in a week, with the exception of one, and sometimes two, Sundays in the month. The work is trying, especially when "drawing" or raking out the retorts, but this severe work is not continuous,

the men having more than half of the whole time for rest. Thus, for every bench of seven retorts, or rather seven mouth pieces, at least three quarters of an hour are allowed for charging and drawing, whereas it is not unusual for the work to be over in from 15 to 20 minutes. In the hottest of the work the men frequently strip to the waist, and many will, while reeking with perspiration, stand under the open louvers in the roof, no matter how strong the draught. At many of the works the men are provided with an unlimited supply of a drink composed of oatmeal and water "skilly," and of which the carbonizers at the Chartered Gasworks (Horseferry road) are found to consume an average of seven quarts each a day, so great is the thirst occasioned by their work. One of the men at these works while incautiously drinking freely, not long since, of cold water when overheated, dropped dead to the ground.

The pay of the head stoker of each gang of men is generally about 33s. a week (of 7 days), the other two stokers working under him receiving, say 30s., although the pay is not always as high as this. The firemen and the coal wheelers are usually paid about 24s. In the winter time, when the daily production of gas is nearly or quite fourfold what it is in summer, a gaswork with 300 long retorts would give employment in all to about 300 men, one half working by day and the other by night. In the winter, therefore, between 4000 and 5000 men are employed in the nineteen gasworks of London. In the spring, when the demand for and consequent production of gas begins to fall off, a large proportion of the stokers seek employment in the neighborhood of London and in the country, generally in brickmaking. At this trade they will work all the summer, returning in the fall to their former place of employment. Many of the managers of the London gasworks can point out men who have worked for them in this manner, or "off and on," for ten or a dozen years. At some of the works, as at the several stations of the Phoenix Company, rooms are fitted up for the use of the workmen in the intervals between "charging" and "drawing." At the Bankside station of the Phoenix Company there is a library of a few hundred volumes, and a daily newspaper, as well as several weeklies, are taken in for the use of the men. Good baths are also fitted up for their free use, after working hours. The library and the baths were also set up at the extensive Vauxhall station of the same company, but it appears that all the books, lead pipe, and brass cocks gradually disappeared, until nothing was left. At the Hackney road works of the Imperial Company, Mr. Clark, had recently fitted up eight baths hardly inferior in any respect to those of a first class hotel, and we sincerely hope, for the welfare as well as the credit of the men, that the fittings will be better respected than they were at Vauxhall.

The production of gas commences the moment the coal is within the heated retort, and before the men can secure the lids a greater or less body of flame appears at the mouth pieces characteristic of the energy with which coal gas enters into combustion with air. The quantity of gas obtained from a ton of ordinary gas coal is commonly within the limits of 2,300 and 2,500 cubic feet, although if the distillation were continued beyond the usual period of six hours an additional quantity of gas would be obtained, but of an inferior illuminating power. At the Surrey Consumers' works, where the retorts are not worked at as high a heat as is adopted at some other establishments, we are informed that the yield of

gas is somewhat below 9,000 ft. per ton, the illuminating power, however, being rather above the average. This difference in the rate of production is believed to be due to the mode in which the retorts are set and worked. As described in our last number, the retort benches at Rotherhithe are in two stages, the fires, which are made to act first on the upper stage of six clay retorts, descending afterwards to eight iron retorts below. This arrangement is found to be economical in respect to the quantity of coke consumed in firing, for, whereas, in all, or nearly all, the other gasworks in London, one-third of all the coke, left after the distillation of gas, is burnt under the retorts, only one fourth of the whole quantity of coke made is burnt in the Surrey Consumers' Works. The coke left on the distillation of a ton of coal is usually one chaldron of 36 bushels, weighing between 13 cwt. and 14 cwt., or about two thirds the original weight of the coal before it went into the retorts. Thus, in a majority of the gasworks in London, one-third of 13½ cwt. or 4½ cwt. of coke is burnt under the retorts for every ton of coal carbonized, the other two-thirds of all the coke made being sold at the rate of say 11s. a chaldron, equal to 16s to 17s. per ton. At the Surrey Consumers' works, therefore, hardly 3½ cwt. of coke is burnt for every ton of coal put into the retorts, 10 cwt., or three fourths of a chaldron, remaining for sale. Every hundredweight of coke saved is worth 10d. but if the saving is attended with a loss in the production of gas, of say 250 ft. worth 13½d, the economy must be altogether illusive. It has been said that when Mr. Croll's system of combined clay and iron retorts was in use at the Great Central Consumers' works, the expenditure of coke was sometimes as low as one-eighth of the whole quantity made, or about 1½ cwt. only for every ton of coal carbonized. However this may have been, and whether or no an average production of gas was obtained, the system has been abandoned, as it is likely to be also, at the Surrey Consumers' works, at Rotherhithe.

The heat on the retorts is commonly maintained between a cherry red and a bright orange, clay retorts being heated considerably above the temperature corresponding to a cherry red heat on iron. By means of sight holes, opening through the brick work between the retorts, as also by the appearance of the retorts themselves, when opened for the purpose of drawing the charges, the firemen are enabled to judge of the temperature and to regulate the fires accordingly. At the Imperial Gasworks, at least, at the Hackney road station, the coke is fed red hot from the retorts into the furnaces, although at most gasworks all the coke is quenched.

Our readers will hardly require to be told that, besides gas, tar and ammoniacal liquor are produced in the retort during the distillation of the coal, and carried over into the mains and vessels into which the crude gas first passes. A ton of Newcastle coal will yield, in the ordinary course of gas making, about ten gallons of tar and an equal quantity of ammoniacal liquor. From cannel coal the quantities of each are about 14 gallons, the yield of gas being 11,500 cubic feet per ton; and from cannel tar naphtha is distilled. We shall have occasion, however, again to refer to the treatment and value of the residual products in question.

LAKE PROPELLERS.—The Great Western Railroad of Canada will place seven propellers on the Sarnia and Chicago route the coming season.

MONETARY AND COMMERCIAL.

The features of the money market noticed in our last week's issue are without any change. As the *Price Current* of this week says, "the demand for money, in this city, continues of the most limited nature, and the banking or money dealing business is now the duller and least profitable of all others. The exchange business, which was a great source of profit, now hardly pays expenses, which is one of the results of the Government currency. Good business paper can be easily negotiated at 8 per cent., the quotations being 8@10 per cent., but good parties, to whose paper no risk is attached, find no difficulty in obtaining money at 6 per cent."

This is no doubt the true state of affairs all over the loyal States. A moderate business is being done in nearly all branches of trade, entirely free from any speculative movements whatever, but to meet the actual wants of the people.

The operations of the Exchange market have not varied much for some time, and indeed the probabilities are that the chances for making "operations" in this line have been curtailed by the introduction of our "national currency." We may, therefore, for the future expect that the Exchange market will be much more steady, and that it will hereafter be furnished at the slightest possible advance over the cost of doing business. Quotations are:

	Buying.	Selling
New York,.....	par	¼ prem.
Boston,.....	par	½ prem.
Philadelphia,.....	par	¾ prem.
Baltimore,.....	par	¾ prem.
Gold,.....	2@2½ prem.	3@3½ pr.

The following is the late law of the State of Wisconsin concerning the Milwaukee and Prairie du Chien Railroad, published April 16, 1862, chapter 86, private and local:

An act to amend chapter 308 of the general Laws of 1860 entitled "An act to facilitate and authenticate the formation of a corporation, by the purchase of the Milwaukee and Mississippi Railroad."

The people of the State of Wisconsin, represented in Senate and Assembly, do enact as follows:

SEC. 1. Section 7 of Chapter 308 of the General and Local Laws of 1860, entitled "An act to facilitate and authenticate the formation of a corporation, by the purchase of the Milwaukee and Mississippi Railroad Company," is hereby repealed.

SEC. 2. This act shall not be construed as in any manner impairing or invalidating the articles of association of the purchasers of the Milwaukee and Mississippi Railroad Company, executed by L. H. Meyers, John Catlin, Allan Campbell, W. Schall, and Louis A. Von Hoffmann, on the 21st day of January, 1861, and filed in the office of the Secretary of State; and the said articles of association of the Milwaukee and Prairie du Chien Railway Company are hereby ratified and confirmed.

SEC. 3. This act shall take effect and be in force from and after its passage and publication. Approved April 5, 1862.

This law repeals section 7 of the reorganization law, and confirms the articles of association under which the Company organized. The surplus which, under section 7, was to be invested in the prior securities, will now be applicable to dividends on the stock.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:30 P. M.
Mail and Express.....	10:30 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, T.ledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day, Toledo & Day, Huntsville.....	5:20 P. M.	11:30 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Terre Haute and Lafayette and Chicago Mail.....	5:05 A. M.	11:10 A. M.
Indianapolis and Chicago Night Express.....	3:20 P. M.	11:50 P. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	5:00 A. M.	10:05 P. M.
Seymour Accommodation.....	3:00 P. M.	8:45 A. M.
Louisville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.
One through train for Louisville and St. Louis Sunday evenings.		

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

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W. H. L. NOBLE.

General Ticket Agent Indianapolis & Cincinnati Railroad.

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Ag. 26.

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THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

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For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DENLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

feb 6.

CHARLES MINOT, Gen'l Sup't.

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Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition,

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

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At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

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CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily for the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M.; Chicago at 6:00 A. M., connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill on Front street, where all necessary information may be had.

Omni-buses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.

W. H. L. NOBLE,

General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums by Franklin Institute.)

OHIO & MISSISSIPPI

RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCEN

NEN, Cairo, and St. Louis.

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.

RETURNING.—Mail Train Leaves East St. Louis, (Sundays excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M. arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office No. 5 East Third street; No. 1 Burnet House corner north-west corner of Front and Broadway; Spencer House office; and at the Depot corner of Front and Mill Streets.

G. B. McLELLAN, Gen'l Superintendent.

Omni-buses call for Passengers, November 11th, 1861.

1861. 1861
FAST TIME.
LITTLE MIAMI
 AND
COLUMBUS AND XENIA
 AND
CINCINNATI, HAMILTON & DAYTON
RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Richmond, Indianapolis and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express—From Cincinnati, Hamilton and Dayton Depot—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,
 General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
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J. W. MORRILL. G. B. BOWERS
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 (Successors to and members of the late firm of
 O. WASON & CO.)
CLEVELAND, OHIO,
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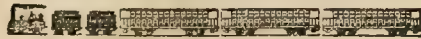
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WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that repairs will be spared to give entire satisfaction in all cases.

1862. 1862.
Pennsylvania Central R.R.
285 MILES DOUBLE TRACK.



(With its Connections)
 IS A FIRST CLASS ROUTE,
 FOR SAFETY, COMFORT AND SPEED,
 TO ALL THE EASTERN CITIES!
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 AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
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 (with close connections from Western Cities.)
 ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
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BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
 "ONE TRAIN RUNS DAILY (430 MILES.)
 VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
 Arriving in advance of all other Routes.

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PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
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 ON NIGHT TRAINS TO
 Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

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By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburgh.

CLARKE & CO., Transfer Agents, Pittsburgh.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

W. W. AIKMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.

CLARKE & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

G. B. NEAL, Parkersburg, Virginia.

HALL & CO., Marietta, Ohio.

H. S. PIERCE & CO., Zanesville, Ohio.

McDOWELL & McCORM, Portsmouth, Ohio.

R. McNEELY, Maysville, Ky.

J. P. JOHNSTON, Ripley, Ohio.

JOHN TODD, Covington, Ky.

G. L. HEATON, Cleveland, Ohio.

R. C. MELDRUM, General Traveling Agent for the South and West.

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Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered, and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.

L. L. HOUPP, Gen'l Ticket Agent, Philadelphia.

H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

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Railroad Machine Works,
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Orders executed promptly to any extent for their

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Either Single or Double Plate,

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WHEELS FITTED

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In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

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MACHINERY,
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JOEL C. LANE

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RAILROAD.

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through Distance 280 Miles;
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NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C., H. and D. Depot, at 7:30 A. M., 1:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth Street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without rebilling or transhipment.

JOHN BRANT, Jr., Superintendent.

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent,

33 Randolph Street, under Sherman House, Chicago, Ills.

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LOW'S RAILWAY DIRECTORY

FOR 1861

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THE NAMES AND RESIDENCES

OF THE

PRESIDENTS, DIRECTORS

AND

OFFICERS

OF ALL THE RAILROADS IN THE

UNITED STATES

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M. W. BALDWIN & CO. ENGINEER'S

BROAD AND HAMILTON ST.^s

Philadelphia, Pa.

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LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for
which they may be required, by the use of one, two, three or
four pair of driving wheels; and the use of the whole, or
so much of the weight as may be desirable for adhesion;
and in accommodating them to the grades, curves, strength
of superstructure, and rail and work to be done. By these
means the maximum useful effect of the power is secured
with the least expense for attendance, cost of fuel, and re-
pairs to Road and Engine.

With these objects in view, and as the result of twenty-
six years' practical experience in the business by our senior
partner, we manufacture five different kinds of Engines,
and several classes or sizes of each kind. Particular atten-
tion paid to the strength of the machine in the plan and
workmanship of all the details. Our long experience and
opportunities of obtaining information enables us to offer
these engines with the assurance that in efficiency, econo-
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of any other kind in use. We also furnish to order Wheels
Axles, Bowling or Low Moor Tire (to fit centers without bo-
ring), Composition Castings for Bearings; every description
of Copper, Sheet Iron and Boiler Work; and every article
appertaining to the repair or renewal of Locomotives.
S. E. U. 419 y

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important improvements, at a reduction on former prices;
and to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a *new style*, working upon the
same principle, and making the same stitch, though not so
highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to unravel, and leaving no chain or
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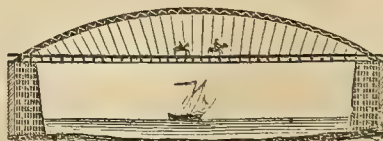
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LOCOMOTIVE TYRE,

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Bar of all Sizes,

And all Forgings for Railroad Machinery.

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Forge Fire, hammered into a Bloom from which Iron
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LOCOMOTIVE WORKS,

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Continue to receive orders and to furnish with promptness
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COAL OR WOOD BURNING

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Railroad Machinery, Tires, etc.

-AND ALSO TO-

Rebuild and Repair Locomotives.

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try, without delay.

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Flues—from 1½ to 10 inches outside diameter, cut
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The Railroad Record.

E. D. MANSFIELD }
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, MAY 22, 1862.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.
—•—
SUBSCRIPTIONS—\$3 Per Annum, in Advance.
—•—

ADVERTISEMENTS.

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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—		
	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	10.10 A. M.
Dayton, Lima, Toledo & Huntsville—		
Dayton & Cincinnati.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.40 A. M.
Sandusky, Dayton & Cincinnati—		5.40 A. M.
Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.10 A. M.
Marietta & Cincinnati—		
Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.
Ohio & Mississippi—		
Mail.....	5.05 A. M.	10.05 P. M.
Seymour Accommodation.....	3.00 P. M.	8.45 A. M.
Express.....	5.00 P. M.	6.53 A. M.
Indianapolis & Cincinnati—		
Mail.....	5.05 A. M.	11.10 A. M.
Chicago Express.....	3.30 P. M.	11.50 P. M.
Dayton & Michigan—		
Toledo, Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.
Kentucky Central— (City time.)		
First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.
The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.		
Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.		

NEW YORK AND NEW HAVEN RAILROAD COMPANY.

The annual meeting of the stockholders of this Company was held in the city of New Haven on Thursday, May 8th. From the report of its proceedings there seems to have been an interesting meeting of the Company. The following is an abstract of the report of the Directors, as read to the meeting for the fiscal year ending March 31, 1862:

EARNINGS.

From passengers, - - -	\$618,181 69
From freight, - - -	123,092 38
From mails, expresses, &c., -	64,786 38

Total, - - - \$808,060 45

During the same period the expenditures were as follows, viz:

For transportation expenses, -	\$213,661 68
For repairs to roadway, &c., -	80,706 64
For equipment, - - -	112,694 04
For fuel, oil, and waste, -	76,102 86
For haulage by horse power, -	22,916 50

Total, - - - \$506,061 72

Leaving as net earnings, - 301,978 73

The resources of the year and their disposal have been as follows:

Cash on hand, April 1, 1861, -	\$223,926 74
Net earnings for the year, -	301,978 73
Reduction of materials on hand,	24,060 97

Total, - - - \$549,966 44

Paid loss in operating canal road,	\$40,675 43
Paid coupons for bond interest,	122,520 00
Paid two dividends, 3% ct. each,	130,000 00
Paid new locomotives, - - -	38,180 13
Reduction of accounts payable,	49,947 50
Cash on hand, April 1, 1862, -	117,643 28

Total, - - - \$549,966 44

In consequence of our National troubles, the gross receipts of the Road have been diminished to the extent of \$118,425 35; but the deficiency has been partially met by a reduction of salaries to the extent of \$93,420 48. Within the last three months the business and receipts of the Road have been much improved, and in future it is believed that they will be still more satisfactory, while an arrangement entered into with the Housatonic Railroad will greatly increase the freighting business from that source.

In addition to the payment of two dividends to the stockholders of three per cent. each, in cash, two powerful coal-burning engines have been added to the equipment of the Road, and paid for; 600 tons of new iron, 41,616 new ties, and 5,000 new wrought iron chairs, have likewise been purchased and paid for out of the earnings.

The use of coal instead of wood for the locomotives has already effected an important saving of about 16 per cent. in expenses for fuel; and as the recent reopening of the Baltimore and Ohio Railroad has removed a difficulty of obtaining supplies of coal (especially during the last year), a further saving in expenses for fuel may be looked for.

With regard to the legal suits in which the

Company has been so long involved on account of the over-issue of stock by Mr. Schuyler, the Directors say:

"Since the decision of Judge Ingraham, in the so-called 'Omnibus' case, confirmed the separation of the so-called 'bogus' stock from the genuine, made by this company, some suits have been brought in the State of New York, and three in the State of Connecticut, for damages. Up to this date, there has been no hearing in any one of these cases; but all the principles involved in the above-mentioned suits were embraced in a suit brought in the Superior Court of New York, by John O. Woodruff and Robert M. Henning, against the company, for damages. The case was decided by Judge Woodruff, at Special Term of January, 1860, in favor of the Company, and from this decision the plaintiffs appealed to the General Term, full bench of three judges, at this present April Term, 1862. The decision of Judge Woodruff was confirmed, with costs to the Defendants, the New York and New Haven Railroad Company. It is hoped that these repeated decisions, all of the same character, will have the effect of preventing further useless litigation."

The Directors conclude their report with the gratifying fact that there have been carried over this road more than 6,000,000 of passengers during the past six years, without causing the loss of a single life or limb to any passenger so carried.

On motion, the report was accepted.

Mr. Paris then offered a motion in favor of the Board hereafter causing their report to be printed and distributed to the stockholders, if possible, one week in advance of the annual meeting.

The President declaring that it would be impossible to accomplish that object, the time between the close of the year and day of annual meeting being too limited to do so, Mr. Paris therefore amended the former motion so as to read: that the next annual meeting be held on the third Thursday in May; and that the Directors print their report and distribute copies of the same to the stockholders at least one week prior to the next annual meeting.

This resolution, after some warm discussion upon proposed amendments and substitutes, was finally adopted.

Mr. Curtis offered a resolution in favor of adjourning the meeting until the 22d instant, on the ground that it was impossible for the stockholders to comprehend properly the true condition of the affairs of the road from a general report seen by them for the first time at the annual meeting, and were therefore unable to proceed and act upon the report and the choice of officers without having an opportunity of more minute information, which proposed to obtain through a committee appointed for that purpose, who should report to the adjourned meeting.

The presentation of this resolution elicited further discussion, some intimating that a scheme had been devised to get in a new Board of Directors, who were favorable to a recognition of the spurious stock, and that the proposed adjournment was only to allow those in-

terested in that programme more time to carry it out if possible.

Mr. Paris then rose and remarked that he recently received a circular signed by some of the oldest and most influential firms and individuals in New York, urging the importance of effecting an important change in the Board of Directors, and soliciting him to authorize certain parties to act as his proxy; that on calling upon these gentlemen, whose names were attached to the circular, one remarked that he did not sign it; another hardly knew the import of the circular; but, being pressed by a friend in whom he had confidence, he consented for his name to be used. Only one person out of the whole number—and he a gentleman connected with another railroad—appeared to know what the circular really was, or why they had signed it, or consented for their names to be used. After weighing all the circumstances which presented themselves to his mind, he (Mr. Paris) came to the conclusion that there were movers behind the scene, whose programme, if carried out, he believed would prove prejudicial to the interests of the Company.

A gentleman, whose name was not learned, then read the names of the gentlemen proposed on the opposition ticket, headed by Mr. Wm. S. Charney of New Haven, who, he said, was a person that no one could say a word against; whereupon, another stockholder rose and said that Mr. Charney had told him that the so-called spurious stock ought to be recognized.

In reply to an inquiry, the President stated that during the period that the Directors were prevented by injunction from paying dividends to the stockholders, the management had disposed of the surplus funds in purchasing the Company's bonds, which had now been reduced to \$1,890,000.

Mr. Paris then offered a resolution in favor of the Directors fixing the amount of permanent bonds of the Company at \$2,000,000, which, with the capital, would be \$5,000,000, and that all surplus funds over that amount be divided among the stockholders, and authorizing the Board of Directors to issue bonds to the amount of \$110,000 if deemed expedient to increase the amount of bonds at once to \$2,000,000, and dividing the \$110,000 among the stockholders.

This resolution was adopted, and in answer to an inquiry, the President remarked that the stockholders might expect a good dividend.

R. R. EXCURSION FROM CHICAGO.—A number of the prominent merchants of Chicago, per invitation of the Companies forming the "old reliable route," left that city yesterday morning, on a special train for a trip to this city, arriving here at about nine o'clock last evening. On the route the company came under the guardianship of Messrs. J. W. Smith and B. F. Masten, of M. C. Railroad; Mr. Geo. Williams, of the L. & I. Railroad; and Messrs. Hall and Barringer, of the I. & C. Road. The excursionists remain till Saturday.

ATLANTIC AND GREAT WESTERN RAILROAD.

We have hitherto noticed the progress of this work, which is designed as the great Western continuation of the New York and Erie Railroad on the broad gauge, through Pennsylvania and Ohio, to the Ohio and Mississippi Railroad at this point. Much has been done by this Company in a very quiet way, and people have hardly been aware that a work of the enormous magnitude of this enterprise has been going on. We understand, however, that arrangements have finally been made, and its Directors have resolved now to push it onward to rapid completion. At present it is completed and in operation from Salamanca, the junction with the Erie Road, 46 miles from Dunkirk, to Corry, on the Erie and Sunbury Road. It there reaches the oil regions, and the freight on oil alone, brought twenty-five miles to the depot in wagons, is now \$5,700 per week.

The New York Tribune, mentioning the prospect of its early completion, says, when the branch is completed from Corry to Titusville, the depot of the oil region, this amount, it is believed, will be increased to \$15,000 per week. The road will reach Meadville by the 1st of July, and Akron, Ohio, by the 1st of October, making two hundred miles from the Erie Junction. For the line to Akron the money and materials have all been provided. Beyond this, the road will be extended to Dayton, Ohio; and from Dayton to Cincinnati an arrangement has been made with the Dayton and Cincinnati Road to lay a third rail. At Cincinnati, the Great Western connects with the Ohio and Mississippi Road, which is of six-foot gauge. Thus, when the whole line is finished, which will probably be within two years, New York will possess a new six-foot gauge connection by rail direct with St. Louis, by which the products of the West, loaded at St. Louis, can be transported without breaking bulk to the Long Dock at Hoboken, and discharged into vessels for shipment to Europe. At Warren or Ravenna a connection will be made with Cleveland, which will tap the Western traffic at that point, and all along the line lateral feeders are already built, which will swell the business of the Atlantic and Great Western. The principal parties in this enterprise are the great banker Salamanca of Madrid, the Duke de Rianzares, husband of the Queen Dowager of Spain; Messrs. Hayward, Mennards & Co. of London, James McHenry of Liverpool, Sir Morton Peto, M. P., and Ed. Betts of London, and Messrs. Saml. Hallett & Co. of New York.

We have always thought it was a great mistake to establish the gauge of this new line at six feet. We believe it is the opinion of railroad men generally that it would be a matter of economy for the Erie and Ohio and Mississippi Railroads to reduce their gauge to a narrower width. We have no doubt, however, that the managers have carefully investigated the questions involved.

CONNECTICUT.

At a meeting of the Legislature of Connecticut, on the 7th of May, Governor Buckingham, in his message, gave the following as the condition of the State Treasury. He says: "Of the many questions of public interest which will require your attention, there will be none more import than those which relate to the finances of the State; to our army of volunteers, and our militia system, as a means of safety; and to our duties to the General Government, during the rebellion.

TREASURY.

Balance in the Treasury, April 1, 1861, \$42,290 50; received for State Bonds during the year, \$2,000,000 00; for taxes from towns, \$249,176 01; from other sources, including premiums on bonds, \$155,279 83—total amount, ...\$2,446,746 34
Expended for military purposes, \$1,866,097 52; for other purposes, \$282,159 40,..... 2,148,256 92

Leaving in the Treasury,..... \$298,498 42

The present indebtedness of the State is—

For Bonds issued, \$2,000,000; for three months' interest, \$80,000—total indebtedness, ...\$2,080,000 00

The expenditures for the present year can not be accurately given, but they may be estimated as follows: For ordinary expenses, \$226,900; interest on bonds, \$120,000; payment to 10,342 volunteers \$30 each, \$310,260; payment to 2,932 families of volunteers, in the aggregate, \$301,224; ordnance, arms, and accoutrements, which will be required for the State militia, in addition to such as are in the arsenal, belonging to the U. States, \$175,000,..... 1,133,384 00

\$3,163,384 00

Charges against the General Government, March 1, 1862, \$1,516,565 74; on which a payment of \$600,000 has been made by a certificate of indebtedness from the U. S. Treasurer, bearing interest. From the charges thus made may be deducted the value of arms and accoutrements, which may be retained for the State militia, \$150,000, and State Tax due the U. S. Government, June 30, \$261,981 90—411,981 90. Add receipts from the usual sources of revenue without taxes from towns, estimated at \$134,500; interest on certificate of indebtedness from the U. States, \$36,000; cash on hand, \$298,489 42,..... 1,573,573 26

Estimated deficiency,.....\$1,589,810 74

"It will probably be necessary to raise the sum mentioned above, which can be done either by taxation or a loan, or by both. This unusual condition of our finances arises principally from the liberal appropriations which have been made for the support of our volunteers and for their families, rendered necessary by the war. For means of suppressing this rebellion, you are aware that the Government is endeavoring to adopt a new and, with us, an untried system of revenue, based upon

the productive industry of the country, and one which will make still larger demands upon our pecuniary resources. But we have abundant ability to meet these claims. A very small part of the profits of our industry will be sufficient to supply the public treasury with ample means to prosecute the war, and furnish a good foundation for public credit. The people are wisely preparing for this demand, which many cheerfully anticipate, and even earnestly desire. Sound policy dictates that you should avail yourselves of this self-sacrificing patriotism by making liberal provision to meet our existing obligations.

LEHIGH COAL AND NAVIGATION COMPANY.

The annual meeting of this Company was held in Philadelphia, May 6. From the report as read it appears that on March 15, 1861, the water was let into the work, and that regular shipments commenced on April 8. These shipments during the year amounted to 994,705 tons, being a falling off of 96,327 from the preceding year. The quantity of lumber carried during the year was 26,247,000 feet, a decrease of 19,278 feet. The total receipts were \$528,240.93 and the net earnings \$326,932.20, being equal to 13 per cent. on the capital stock. The funded debt of the Company has been decreased \$628,889.33; the floating debts were \$53,321.27, and the general debt reduced \$575,368.06. The total liabilities of the Company are \$5,681,860.97, which is considerably less than they were in 1860.

A resolution was adopted as follows:

Resolved, That the subject of the conversion of the distributed scrip shares of the Company into stock be referred to a committee of five stockholders who are also scrip-holders and loanholders of the Company, whose duty it shall be to examine the subject fully in respect to all the rights and interests involved in the measure, with authority, at the expense of the Company, to consult counsel upon such questions of law as shall arise, and, if they shall find it practicable to do so, to report to an adjourned meeting of the stockholders, to be held on the 28th day of May instant, a plan for such conversion, which in its operation and effects shall be just and equitable to the rights and interests of all classes, without violating or infringing upon the rights of any; and that a committee of three be nominated by the meeting for the purpose of forthwith selecting from the list of stockholders the names of suitable persons to constitute such committee as aforesaid, and report the same to the meeting for its approval.

The following gentlemen were selected as the committee: Thomas Williamson, Henry Cope, Samuel Elkin, Robert S. Johnson and William Kirkham.

The following gentlemen were chosen officers for the ensuing year:

James Cox, President; Edwin Walter, Treasurer and Secretary. Managers, Erskine Hazard, John Farnum, Francis R. Cope, Richard Richardson, Alexander Fullerton, Andrew

Manderson, James S. Cox, Jacob P. Jones, Francis C. Yarnall and Samuel E. Stokes.

Being the same officers as last year, with exception of Mr. Cope, who replaces Mr. Boleer.

A BILL

To aid in the construction of a railroad and telegraph line from the Missouri river to the Pacific ocean, and to secure to the government the use of the same for postal, military, and other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Isaac Sherman, Dean Richmond, Royal Phelps, Wm. H. Ferry, Henry A. Paddock, Lewis J. Stancliff, Charles A. Secor, Samuel R. Campbell, of New York; John Edgar Thompson, Benjamin Haywood, Joseph H. Scranton, Joseph Harrison, George W. Cass, John H. Bryant, Daniel J. Morrell, of Pennsylvania; Noah L. Wilson, Amasa Stone, Wm. H. Clement, S. L. L'Hommedieu, of Ohio; Wm. M. McPherson, R. W. Wells, Willard P. Hall, Armstrong Beatty, of Missouri; S. J. Hensley, Peter Donahue, C. P. Huntington, T. D. Judah, of California; John Atchison and John D. Wiaters, of the Territory of Nevada; John D. Campbell, R. N. Rice, Charles A. Trowbridge, and Ransom Gardner, of Michigan; Wm. F. Coolbaugh, Lucius H. Langworthy, Hugh T. Reid, Hoyt Sherman, of Iowa; Wm. B. Ogden, Charles G. Hammond, Henry Farnum, Amos C. Babcock, and W. Seldon Gale, of Illinois; Wm. H. Swift, Samuel T. Dana, John Bertram, Franklin S. Stevens, of Massachusetts; Franklin Gorin, Laban J. Bradford, and John T. Levis, of Kentucky; James Dunning, of Maine; Henry H. Baxter, of Vermont; Wm. S. Ladd, A. M. Berry, of Oregon; William Bunn, jun., John Catlin, Levi Sterling, of Wisconsin; Charles Paine, Thomas A. Morris, David C. Branham, Samuel Hanna, Jonas Votaw, Jesse L. Williams, of Indiana; Thos. Swan, Chauncey Brooks, Edward Wilkins, of Maryland; Francis R. E. Cornell, David Blakely, of Minnesota; Joseph A. Gilmore, of New Hampshire; W. H. Grimes, J. C. Stone, Chester Thomas, John Kerr, of Kansas; Gilbert C. Monell, and Augustus Kountz, of Nebraska; and John Evans, of Colorado; together with five commissioners to be appointed by the Secretary of the Interior, and all persons who shall or may be associated with them, and their successors, are hereby created and erected into a body corporate and politic, in deed and in law, by the name, style, and title of "The Union Pacific Railroad Company;" and by that name shall have perpetual succession, and shall be able to sue and to be sued, plead and be impleaded, defend and be defended, in all courts of law and equity within the United States, and may make and have a common seal; and the said corporation is hereby authorized and empowered to lay out, locate, construct, furnish, maintain, and enjoy a continuous railroad, with the appurtenances, from such points on the one hundred and second meridian of longitude west from Greenwich to the western boundary of Nevada Territory, upon the route and terms hereinafter provided, and is hereby vested with all the powers, privileges, and immunities necessary to carry into effect the purposes of this act as herein set forth. The capital stock of said company shall consist of one hundred thousand shares of one thousand dollars each, which shall be subscribed for and held in not less than one share or more than two hundred shares by any one person, and shall be trans-

ferable in such manner as the by-laws of said corporation shall provide. The persons hereinbefore named are hereby constituted and appointed commissioners, with power to add to their number by appointment of not more than two additional commissioners for any State or Territory not herein represented, and such body shall be called the Board of Commissioners of the Union Pacific Railroad, and eleven shall constitute a quorum for the transaction of business. The first meeting of said board shall be held at Chicago at such time as the commissioners from Illinois herein named shall appoint, not more than three nor less than one month after the passage of this act, notice of which shall be given by them to the other commissioners by depositing a call therefor in the post office at Chicago, post paid, to their address at least thirty days before said meeting. Said board shall organize by the choice from its number of a president, secretary, and treasurer, and they shall require from said treasurer such bonds as may be deemed proper, and may from time to time increase the amount thereof as they may deem proper. It shall be the duty of said board of commissioners to open books, or cause books to be opened, at such times and in such principal cities in the United States as they or a quorum of them shall determine, to receive subscriptions to the capital stock of said corporation, and a cash payment of ten per centum on all subscriptions, and to receipt therefor. So soon as two thousand shares shall be in good faith subscribed for, and ten dollars per share actually paid into the treasury of the company, the said president and secretary of said board of commissioners shall appoint a time and place for the first meeting of the subscribers to the stock of said company, and shall give notice thereof in at least one newspaper in each State in which subscription books have been opened at least thirty days previous to the day of meeting, and such subscribers as shall attend the meeting so called, either in person or by proxy, shall then and there elect by ballot not less than thirteen directors for said corporation; and in such election each share of said capital shall entitle the owner thereof to one vote. The president and secretary of the board of commissioners shall act as inspectors of said election, and shall certify under their hands the names of the directors elected at said meeting; and the said commissioners, treasurer, and secretary shall then deliver over to said directors all the properties, subscription books and other books in their possession. At the time of the first and each triennial election of directors by the stockholders, two additional directors shall be appointed by the President of the United States, who shall act with the body of directors, and to be denominated directors on the part of the government; any vacancy happening in the government directors at any time may be filled by the Secretary of the Interior. The directors to be appointed by the President shall not be stockholders in the Union Pacific Railroad Company. The directors so chosen shall, as soon as may be after their election, elect from their own number a president and vice president, and shall also elect a treasurer and secretary. No person shall be a director in said company unless he shall be a bona fide owner of at least five shares of stock in said company, except the two directors appointed by the President as aforesaid. Said directors shall have power to make by-laws, rules, and regulations as they shall deem needful and proper, touching the disposition of stock, property, estate and effects of the company, not inconsistent herewith, the transfer of shares, the term of office, duties and

conduct of their officers and servants, and all matters whatsoever which may appertain to the concerns of said company; and the said board of directors shall have power to appoint such engineers, agents, and subordinates as may from time to time be necessary to carry into effect the object of this act, and to do all acts and things touching the location and construction of said road. Said directors may require payment of subscriptions to the capital stock, after due notice, at such times and in such proportions as they shall deem necessary to complete the railroad and telegraph within the time in this act prescribed. Said president, vice-president, and directors shall hold their office for three years, and until their successors are duly elected, or for such less time as the by-laws of the corporation may prescribe; and a majority of said directors shall constitute a quorum for the transaction of business. The secretary and treasurer shall give such bonds, with such security, as the said board shall from time to time require, and shall hold their offices at the will and pleasure of the directors. Annual meetings of the stockholders of the said corporation, for the choice of officers (when they are to be chosen) and for the transaction of annual business, shall be holden at such time and place and upon such notice as may be prescribed in the by-laws.

SEC. 2. *And be it further enacted*, That the right of way through the public lands be and the same is hereby granted to said company for the construction of said railroad and telegraph line; and the right, power, and authority is hereby given to said company to take from the public lands adjacent to the line of said road earth, stone, timber, and other materials for the construction thereof; said right of way is granted to said railroad to the extent of two hundred feet in width on each side of said railroad where it may pass over the public lands, including all necessary grounds for stations, buildings, workshops, and depots, machine shops, switches, side tracks, turntables, and water stations. The United States shall extinguish as rapidly as may be the Indian titles to all lands falling under the operation of this act and required for the said right of way and grants hereinafter made.

SEC. 3. *And be it further enacted*, That there be, and is hereby, granted to said company, for the purpose of aiding in the construction of said road and the telegraph line, and to secure the safe and speedy transportation of the mails, troops, munitions of war, and public stores thereon, every alternate section of land, designated by odd numbers, to the amount of five alternate sections per mile on each side of said railroad, wherever, on the line thereof, the United States have full title, free from pre-emption or other claims or rights, at the time the line of said road is definitely fixed: *Provided*, That all mineral lands shall be excepted from the operation of this section. And all such lands, so granted by this section, which shall not be sold or disposed of by said company within three years after the entire road shall have been completed, shall be settled and pre-empted like other lands, at a price not exceeding one dollar and twenty-five cents per acre, to be paid to said company.

SEC. 4. *And be it further enacted*, That whenever said company shall have completed forty consecutive miles of any portion of said railroad and telegraph line, ready for the service contemplated by this act, and supplied with all necessary drains, culverts, viaducts, crossings, sidings, bridges, turnouts, watering places, depots, equipments, furniture, and all

other appurtenances of a first class railroad, the rails and all the other iron used in the construction and equipment of said road shall be American manufacture of the best quality, the President of the United States shall appoint three commissioners to examine the same and report to him in relation thereto; and if it shall appear that forty consecutive miles of said railroad and telegraph line have been completed in all respects as required by this act, then, upon certificate of said commissioners to that effect, patents shall issue conveying the right and title to said lands to said company to the amount aforesaid; and patents shall in like manner issue as each forty miles of said railroad and telegraph line are completed, upon certificate of said commissioners. Any vacancies occurring in said board of commissioners by death, resignation, or otherwise, shall be filled by the President of the United States.

SEC. 5. *And be it further enacted*, That, for the purposes herein mentioned, the Secretary of the Treasury shall, upon the certificate in writing of said commissioners of the completion of forty consecutive miles of said railroad and telegraph, in accordance with the provisions of this act, issue to said company bonds of the United States of one thousand dollars each, payable in thirty years after date, bearing six per centum per annum interest, (said interest payable semi-annually,) which interest may be paid in United States Treasury notes or any other money or currency which the United States have or shall declare lawful money and a legal tender, to the amount of sixteen of said bonds per mile for such section of forty miles; and to secure the repayment to the United States, as hereinafter provided, of the amount of said bonds so issued and delivered to said company, together with all interest thereon which shall have been paid by the United States, the issue of said bonds and delivery to the company shall ipso facto constitute a first lien or mortgage on the whole line of the railroad and telegraph finished and completed according to the provisions of this act, and in consideration of which said bonds may be issued; and on the refusal or failure of said company to redeem said bonds, or any part of them, when required so to do by the Secretary of the Treasury, in accordance with the provisions of this act, the said road, with all its rights, functions, immunities, and appurtenances thereunto belonging, and also all lands granted to said company by the United States, which, at the time of said default, shall remain in the ownership of said company, shall at once vest in the United States, and the same shall immediately be taken possession of by the Secretary of the Treasury, for the use and benefit of the United States: *Provided*, This section shall not apply to that part of any road now constructed and forming a part of said forty miles.

SEC. 6. *And be it further enacted*, That the grants aforesaid are made upon condition that said company shall keep said railroad and telegraph line in repair and use, and shall at all times transmit despatches over said telegraph line, and transport mails, troops, and munitions of war, supplies, and public stores upon said railroad for the government, whenever required to do so by any department thereof, and that the government shall at all times have the preference in the use of the same for all the purposes aforesaid, (at fair and reasonable rates of compensation, not to exceed the amounts paid by private parties for the same kind of service;) and all compensation for services rendered for the

government shall be applied to the payment of said bonds and interest until the whole amount is fully paid. Said company may also, pay the United States, wholly or in part, in the same or other bonds, treasury notes, or other evidences of debt against the United States, to be allowed at par; and after said road is completed, until said bonds and interest are paid, at least five per centum of the net earnings of said road shall also be annually applied to the payment thereof.

SEC. 7. *And be it further enacted*, That said company shall file their assent to this act, under the seal of said company, in the Department of the Interior, within one year after the passage of this act, and shall complete said railroad and telegraph from the one hundred and second meridian of longitude, aforesaid, to the western boundary of Nevada Territory before the first day of July, one thousand eight hundred and seventy-four: *Provided*, That within two years after the passage of this act said company shall locate the general route of said road, as near as may be, by proper railroad surveys, and shall file a map of the same in the Department of the Interior, whereupon the Secretary of the Interior shall cause the lands hereby granted to be withdrawn from pre-emption, private entry, and sale; and when any portion of said route shall be finally located, the Secretary of the Interior shall cause the said lands to be surveyed and set off as fast as may be necessary for the purposes herein named: *Provided*, that in fixing the point of connection of the main trunk with eastern connections, it shall be fixed at the most practicable point for the construction of the Iowa and Missouri branches, as hereinafter provided.

SEC. 8. *And be it further enacted*, That the line of said railroad and telegraph shall commence at the one hundred and second meridian of longitude west of Greenwich, at the termination of the Leavenworth, Pawnee, and Western railroad and telegraph line, as herein provided, to meet and connect therewith as herein provided; thence running westerly upon the most direct, central, and practicable route, through the territories of the United States, to the western boundary of the Territory of Nevada, there to meet and connect with the line of the Central Pacific Railroad Company of California.

SEC. 9. *And be it further enacted*, That the Leavenworth, Pawnee, and Western Railroad Company of Kansas are hereby authorized to construct a railroad and telegraph line, in conformity with their charter from said State, from the Missouri river, at Kansas City, to the one hundred and second meridian of longitude west from Greenwich, as herein provided, upon the same terms and conditions in all respects as are provided in this act for the construction of the railroad and telegraph line first mentioned, and to meet and connect with the same at the meridian of longitude aforesaid; and in case the general route or line of road from the Missouri river to the Rocky mountains should be so located as to require a departure northwardly from the proposed line of said Kansas railroad before it reaches the meridian of longitude aforesaid, the location of said Kansas road shall be made so as to conform thereto; and said railroad through Kansas shall be so located between Kansas City and the one hundred and second meridian of longitude, that the several railroads from St. Joseph's and Iowa, herein authorized to connect with the same, can make the connection within the limits prescribed in this act without deviating from the general direction of the whole line of the Pacific coast.

The route in Kansas, to the one hundred and second meridian of longitude, to be subject to the approval of the President of the United States. And said Kansas company may proceed to build said railroad to the one hundred and second meridian of longitude west from Greenwich, upon such general route adopted, through any territory on which said general location may be made, under the conditions named in this act. The Central Pacific Railroad Company of California, a corporation existing under the laws of the State of California, are hereby authorized to construct a railroad and telegraph line from the Pacific coast, at or near San Francisco, or the navigable waters of the Sacramento river, to the eastern boundary of California, upon the same terms and conditions, in all respects, as are contained in this act for the construction of said railroad and telegraph line first mentioned, and to meet and connect with the first mentioned railroad and telegraph line on the eastern boundary of California. Each of said companies shall file their acceptance of the conditions of this act in the Department of the Interior within six months after the passage of this act.

SEC. 10. *And be it further enacted*, That the said company, chartered by the State of Kansas, shall complete one hundred miles of their said road, commencing at Kansas City, within two years after filing their assent to the conditions of this act, as herein provided, and one hundred miles per year thereafter, until the whole is completed; and the said Central Pacific Railroad Company of California shall complete fifty miles of their said road within two years after filing their assent to the provisions of this act, as herein provided, and fifty miles per year thereafter, until the whole is completed; and after completing their roads, respectively, said companies, or either of them, may unite upon equal terms with the first-named company in constructing so much of said railroad and telegraph line across the territories as shall remain to be constructed. And the Hannibal and Saint Joseph Railroad Company, the Pacific Railroad Company of Missouri, and the first named company, or either of them, on filing their assent to this act, as aforesaid, may unite upon equal terms, under this act, with the said Kansas company in constructing said railroad and telegraph to said meridian of longitude; and in case said first-named company shall complete their line to the western boundary of California before it is completed across said State by the Central Pacific Railroad Company of California, said first-named company is hereby authorized to continue in constructing the same through California, upon the terms mentioned in this act until said roads shall meet and connect, and the whole line of said railroad and telegraph is completed; and the Central Pacific Railroad Company of California, after completing its road across said State, is authorized to continue the construction of said railroad and telegraph, upon the route located east of said State and Territory, on the terms provided in this act, until said roads shall meet and connect, and the whole line of said railroad and telegraph is completed.

SEC. 11. *And be it further enacted*, That for three hundred miles of said road most mountainous and difficult of construction, to-wit: one hundred and fifty miles westwardly from the eastern base of the Rocky mountains, and one hundred and fifty miles eastwardly from the western base of the Sierra Nevada mountains, the bonds to be issued to aid in the construction thereof shall be treble

the number per mile hereinbefore provided, and the same shall be issued, and the lands herein granted shall be set apart, upon the construction of every twenty miles thereof, upon the certificate of the commissioners as aforesaid that twenty consecutive miles of the same are completed; and between the sections last named of one hundred and fifty miles each, the bonds to be issued to aid in the construction thereof shall be double the number per mile first mentioned, and the same shall be issued, and the lands herein granted be set apart, upon the construction of every twenty miles thereof, upon the certificate of the commissioners as aforesaid that twenty consecutive miles of the same are completed: *Provided*, That no more than fifty thousand of said bonds shall be issued under this act to aid in constructing the main line of said railroad and telegraph.

SEC. 12. *And be it further enacted*, That whenever the route of said railroad shall cross the boundary of any State or Territory, or said meridian of longitude, the two companies meeting or uniting there shall agree upon its location at that point, with reference to the most direct and practicable through route, and in case of difference between them as to said location the President of the United States shall determine the said location; the companies named in each State and Territory to locate the road across the same between the points so agreed upon, except as herein provided. The track upon the entire line of railroad shall be of uniform width, to be agreed upon by said companies, so that, when completed, cars can be run from the Missouri river to the Pacific coast; the grades and curves shall not exceed the maximum grades and curves of the Baltimore and Ohio railroad; the whole line of said railroad and telegraph shall be operated and used for all purposes of communication, travel, and transportation, so far as the public and government are concerned, as one connected, continuous line; and the companies herein named in Missouri, Iowa, Kansas, and California, filing their assent to the provisions of this act, shall receive and transport all iron rails, chairs, spikes, ties, timber, and all materials required for constructing and furnishing said first-mentioned line between the one hundred and second meridian of longitude and western boundary of Nevada Territory, whenever the same is required by said first-named company, at cost, over that portion of the roads of said companies constructed under the provisions of this act.

SEC. 13. *And be it further enacted*, That the Hannibal and Saint Joseph Railroad Company of Missouri may extend its roads from Saint Joseph to connect and unite with the road through Kansas, upon filing its assent to the provisions of this act, upon the same terms and conditions, in all respects, for one hundred miles in length next to the Missouri river, as are provided in this act for the construction of the railroad and telegraph line first mentioned, and may, for this purpose, use any railroad charter which has been or may be granted by the legislature of Kansas. And the Leavenworth, Pawnee, and Western Railroad Company of Kansas may construct their road from Leavenworth to unite with the road through Kansas, within fifty miles of the Missouri river, upon the same terms and conditions in all respects as are provided in this act for the construction of the railroad and telegraph line first mentioned.

SEC. 14. *And be it further enacted*, That the said Union Pacific Railroad Company is hereby authorized and required to construct

a single line of railroad and telegraph from a point on the western boundary of the State of Iowa, westerly, upon the most direct and practicable route, so as to form a connection with the lines of said company at some point not further west than the one hundred and second meridian of longitude aforesaid, from the point of commencement on the western boundary of the State of Iowa, upon the same terms and conditions in all respects as are contained in this act for the construction of the said railroad and telegraph first mentioned; and the said Union Pacific Railroad Company shall complete one hundred miles of the road and telegraph in this section provided for in two years after filing their assent to the conditions of this act, as by the terms of this act required, and at the rate of one hundred miles per year thereafter, until the whole is completed: *Provided*, That a failure upon the part of said company to make said connection in the time aforesaid, and to perform the obligations imposed on said company by this section, and to operate said road in the same manner as the main line shall be operated, shall forfeit to the government of the United States all the rights, privileges, and franchises granted to and conferred upon said company by this act. And whenever there shall be a line of railroad completed through Minnesota or Iowa to Sioux City, or a point opposite the same on the Missouri river, then said corporation shall construct a branch road from Sioux City, to connect with said main line within three hundred miles of the Missouri river, and it is hereby authorized to construct the same upon the same terms and conditions as are provided in this act for the construction of the main line aforesaid: *Provided*, That not more than seven thousand five hundred dollars in bonds per mile shall be issued for the construction of said branch road: *And provided, further*, That if said corporation shall fail to construct the branches provided for in this section it shall forfeit the privileges granted by this act.

SEC. 15. *And be it further enacted*, That any other railroad company now incorporated, or hereafter to be incorporated, shall have the right to connect their road with the one provided for by this act, at such places and upon just and equitable terms, or such as government may from time to time prescribe. Wherever the word company is used in this act it shall be construed to embrace the words their associates, successors, and assigns, the same as if the words had been properly added thereto.

SEC. 16. *And be it further enacted*, That at any time after the passage of this act all of the railroad companies named herein, and assenting hereto, or any two or more of them, are authorized to form themselves into one consolidated company; notice of such consolidation, in writing, shall be filed in the Department of the Interior, and such consolidated company may thereafter proceed to construct said railroad and telegraph line upon the terms and conditions provided in this act.

SEC. 17. *And be it further enacted*, That in case said company or companies shall fail to comply with the terms and conditions of this act, in not completing said road and telegraph within a reasonable time, or in not keeping the same in repair and use, but shall permit the same, for an unreasonable time, to remain unfinished, or out of repair, and unfit for use, Congress may pass any act to insure the speedy completion of said road, or put the same in repair and use, and may direct the income of said railroad and telegraph line to be thereafter devoted to the use of the United States, to repay all such expenditures caused

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	R. of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N. Y. & Pa.	48		\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.	68	380	13,111,800	10,781,833	566,070	3,922,203	2,305,788	Sept. 30, 1860	Md. Sterling Mortgage.....	3,000,000	5			
do do										do	2,500,000	6	87 1/2	1885	
do do										do	700,000	6	90	1880	
do do										do	1,128,500	6	92	1875	
do Washington Branch.....	Md.			1,650,000						do	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind.	118		1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7		1866	
do do										2d	160,000	7		1870	
Buffalo and State Line.....	N. Y. & Pa.	122 1/2	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	132 1/2	75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000	6		1864	
Camden and Amboy.....	N. J.	96		3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	367,000	7		1861	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7		1864	
do do										1st	860,000	7		1864	
do do										2d	800,000	7		1865	
do do										3d	950,000	7		1865	
do do										4th	1,365,800	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7		1865 & 1870	
do do										2d	600,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						3d	1,000,000	10			
do do										1st Mortgage.....	400,000	7			
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	2d	200,000	7			
do do										Pref. 1st Mor. & S. F.	1,250,000	7	80	Feb. & Aug.	
do do										Gen'l 1st Mortgage.	3,500,000	7	52 1/2	Feb. & Aug.	
Chicago and Rock Island.....	Ills.	45 1/2	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	2d	2,000,000	6	24	May 1.	
Chicago, Burlington and Quincy.....	"	70	138	4,689,340	4,814,315		1,514,428	761,830		1st Mortgage.....	2,000,000	7		1870	
do do										Cons. 1st Mort. S. F.	2,172,000	8	103	1883	
do do										" 2d " S. F.	813,000	8		1890	
do do										1st Mor. Chi. & Aur.	399,000	7		1867	
do do										2d " " "	303,090	7		1869	
do do										1st "Cent. Mil. Tract	392,000	7		1864	
do do										2d " " "	245,000	8		1868	
Chicago, Iowa and Nebraska.....	Ind.	82		No report											
Cincinnati and Chicago Air Line.....	Ohio.	60		2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7		1867	
do do										2d	950,000	7		1880	
Cincinnati, Hamilton and Dayton.....	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000	7			
do do										2d	532,000	7			
do do										3d	104,000	7			
Cleveland and Mahoning.....	Ohio.	68 1/2		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,509	7			
do do										1st Mortgage.....	850,000	7			
do do										2d	469,000	7			
do do										3d	344,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	20 1/2	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	13 1/2	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7		1873	
do do										3d 2d Ex.....	1,165,000	7		1865	
Cleveland and Toledo.....	Ohio.	46 1/2	148	3,343,800	3,850,670	196,413	919,971	493,956	May 31, 1861.	4th 3d Ex.....	1,154,000	7			
do do										1st Mor. Jun. 1st Div.	339,000	7		1867	
do do										1st " " 2d Div.	263,000	7		1872	
do do										2d " " "	265,000	7		1862	
do do										1st " Tol. Nor. & Clev	521,000	7		1863	
do do										2d " " "	293,300	7		1864	
do do										Junction Income..	44,500	7		1862	
do do										C. & T. Income..	309,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	116 1/2	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	125	98 1/2	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7		1861	
do do										2d	303,000	7		1862	
Columbus and Xenia.....	Ohio.	87 1/2	54 1/2	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700	7		1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.											
Dayton and Michigan.....	"	142		2,176,666	2,512,000	292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
do do										2d	2,212,000	8			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7		1875	
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000	7		1866	
do do										2d	1,000,900	8			
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734	7			
Evansville and Crawfordsville.....	Ind.	132		986,061	1,219,100	249,868	124,140			2d	18,000	7			
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000	6		1873	
do do										2d	1,200,000	7		1869 & 1870	
Galena and Chicago Union.....	Ills.	78	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,903,000	104	98 1/2	May 1, 1875	
do do										2d	1,200,000	7			
Great Western.....	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report					Land mortgage...	5,000,000	47			
Greenville and Miami.....	Mo.	32		300,000	473,000	75,000	63,141	13,573	Sept. 1, 1860.	Mortgage Conv.....	1,354,000	30			
Hannibal and St. Joseph.....	Mo.	206		1,041,086	10,554,000	220,356	996,907	512,933	Sept. 1, 1860.	1st Mortgage.....	927,000	6		1873	
do do										1st Mortgage.....	4,000,000	7	102	1869 & 1870	
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	2d	2,000,000	7	86 1/2	18.0	
Hudson River.....	N. Y.	42 1/2	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	3d	1,840,000	7	87	1875	
do do										Optional.....	38,900	7	77	1868	
Illinois Central.....	Ills.	65 1/2	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Construction.....	12,885,000	7	92 1/2	1875	
do do										"	4,115,000	6		1875	
do do										Debentures.....	42,740	7			
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000	10			
do do										2d	578,000	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		Income.....	38,760	10			
do do										1st Mortgage.....	500,000	7		1866	
do do										2d	400,000	7			
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort.....	200,000	7			
do do										1st Mortgage.....	649,984	7			
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d	314,000	7			
Kron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.		86½	\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st	249,000	7		1861	
do										2d	392,000	7		1873	
Kentucky Central (Covington and Lexington).....	Ky.		99	Sold out under mortgage	2,930,000	337,632	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st	260,000	7			
do										2d " Conv.	1,000,000	7			
do										3d	600,000	7			
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiver.						1st Mortgage E. D.	901,000				
do										2d " E. D.	1,000,000				
do										1st Land Grant W D	4,000,000	12			
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report		June 30, 1861	1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.		29	514,433	130,000		10,944	43,267	Jan. 1, 1862	1st Mortgage.....	1,300,000	6		1863	
Little Miami.....	Ohio.	100	65				1,330,050	529,981	June 30, 1861	City Loan.....	174,000				
Louisville and Frankfort.....	Ky.		65	1,169,59	354,519		245,910	98,679		1st Mortgage.....	248,000				
do										1st Mortgage.....	2,100,000	7			
Louisville and Nashville.....	Ky.		268	5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.		288	2,800,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.		87	1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage	600,000	7		1861	
Marletta and Cincinnati.....	Ohio.		208	8,561,213	193,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868	
do										2d	2,000,000	7			
do										3d	1,500,000	7			
do										Sterling Income.....	333,000	4			
do										Domestic	928,617				
Michigan Central.....	Mich.	60½	284	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	1st Mortgage Sterling	467,483	6		1872	
do										1st " Conv.	500,000	8	105		1869
do										1st " unconv.	250,000	8			1860
do										1st " Dollar Conv.	2,598,000	8			1869
do										1st " S. F. Conv.	4,153,000	8			1862
Michigan South'n & North'n Indiana	Mich.&	24½	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. So.	991,000	90		1860	
do										" Nor. Ind.	985,000	84		1861	
do										" Goshen Line.	1,168,000	84		1868	
do										S. F. Toledo	2,850,000	85		1885	
do										2d Mortgage	2,465,000	73		1877	
Illwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8			
do										2d	200,000	8			
do										1st Mortgage.....	420,000	7			
do										2d	600,000	8			
Milwaukee and Horicon.....	Wis.		42	1,101,200						1st Mortgage.....	2,556,000	7	95½	1891	
Milwaukee and Prairie du Chien.....	Wis.	39	192	4,944,000	2,556,000		683,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7			
do										2d " S. F.	400,000	7			
do										Oskaloosa Div.	1,425,000	8			
Mississippi and Missouri.....	Iowa.		55	No report						Land Grant.....	7,000,000	7			
do										Mortgage.....	711,000	7			
New Jersey.....	N. J.	13	34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	1st Mortgage.....	3,000,000	105½			
New Jersey Central.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	2d	4,000,000				
New York and Erie Pref.....	N. Y.	67½		Sold under mortgage			5,590,916	1,979,405	Sept. 30, 1860.	3d	6,000,000	97			
do		40								4th	4,900,000	89			
do										5th	1,792,500	110			
New York and Harlem Prof	Conn.	36½	138	5,717,190	6,055,752	.....	1,142,851	433,716	Sept. 30, 1860.	1st Mortgage.....	2,950,000	7		1873	
do										2d	1,000,000	100		1864	
New York and New Haven.....	Conn.	15		3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7		Dec. 1, 1866	
do										"	978,000	6		Oct. 1, 1875	
New York Central.....	N. Y.	89½	556	24,000,000	14,613,005	none.	7,369,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,925,000	6	98	May 1, 1863	
do										Mortgage.....	3,000,000	7	105	June 15, 1864	
Northern Central.....	Md.		138	2,200,000	5,890,300	537,966	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,086,500	6		1885	
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6			
Ohio and Mississippi, Eastern Div....	Ohio & Ind		192	Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500				
do										3d	316,995				
do										Construction.....	4,637,920				
do										Income.....	3,591,185				
Ohio and Mississippi, Western Div....	Ills.		148	.....	3,292,403		No report			State Loan.....	7,000,000	38			
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W.	2,800,000	6			
do										Construction.....	4,500,000	6			
Pennsylvania.....	Pa.		359	13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,905,000	6		1889	
do										2d	2,319,000	6		1875	
do										2d " Sterling.	1,937,440	6		1875	
do										State Works.....	7,200,000	5			
Peru and Indianapolis.....	Ind.		74	1,100,090	820,000	80,000	No report			1st Mortgage	2,300,000	6		1894	
Philadelphia, W. and Baltimore.....	Del.		98	5,600,000	2,310,000		1,236,397	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863	
do										1st Mort. O. & P.	1,000,000	7		1865	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	2d	750,000	7		1866	
do										1st " O. & I.	1,000,000	7		1872	
do										2d	380,000	7		1873	
Pittsburgh and Connellsville.....	Pa.		49	1,755,836	1,292,700	67,869	80,553	29,680	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000				
Racine and Mississippi.....	Wis.		104	2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.						
do															
Sandusky, Dayton and Cincinnati..	Ohio.		170	2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1866	
do										"	997,000	7		1866	
do										"	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.		125	848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1866	
do															
Springfield, Mt. Vernon & Pittsburgh..	Ohio.		50	1,000,000	1,050,000	200,000				1st Mortgage.....	500,000				
do										2d	450,000				
do										1st Mortgage.....	1,500,000	7		1870	
do										2d	900,000	7		1865	
Staubenville and Indiana..	Ohio.			No report						1st Mortgage Conv.	1,000,000	7	75	1862	
do										" Conv.	2,000,000	7		1868 & 1870	
do										1st " Bel. & Ill.	517,000	7		1873	
Terre Haute and Richmond.....	Ind.	100	73	1,381,450	230,000	none.	377,092	216,183	Dec. 1, 1861.	1st Mortgage.....	210,000	7	75½	1866	
do										1st Mortgage.....	3,400,000	7		Aug. 1, 1865	
do										2d	2,500,000	7	45	Nov. 1, 1876	
do										Mort. Coupons.....	96,049	7		1860 to 1865	

by the default and neglect of such company or companies: *Provided*, That if a road from the Missouri river to the city of Sacramento is not completed on the first day of January, eighteen hundred and seventy six, the entire road or roads built under the provisions of this act shall be forfeited to the United States.

Sec 18. *And be it further enacted*, That said company, if consolidated, and if not, each of said companies completing a portion of said road under this act, shall make and file with the Secretary of the Interior a yearly return, duly certified by the proper officers and verified by the oath of the president and secretary of said company, or each of said companies, showing the cost, earnings, income, and expenditures of said railroad and telegraph line as accurately as possible; and whenever it appears thereby that the net earnings of the entire road and telegraph, including the amount allowed for services rendered for the United States, after deducting all expenditures, including repairs and the furnishing, running, and managing of said road, shall exceed ten per centum upon its cost, exclusive of the five per centum to be paid to the United States, Congress may reduce the rates of fare thereon if unreasonable in amount, and may fix and establish the same by law. And the better to accomplish the object of this act, namely, to promote the public interest and welfare by the construction of said railroad and telegraph line, and keeping the same in working order, and to secure to the government at all times (but particularly in time of war) the use and benefits of the same for postal, military and other purposes, Congress may, at any time, having due regard for the rights of said companies named herein, add to, alter, amend, or repeal this act.

Sec. 19. *And be it further enacted*, That persons in possession of government lands in the Territory of Nevada at the time of the passage of this act, or who may under the territorial laws have the constructive right to the possession of one hundred and sixty acres, should such lands be conveyed to said railroad company under this act, shall have the right to purchase the same from said company at the same price that the government shall fix for the sale of the adjoining lands.

LONDON GAS WORKS.

[Continued from page 153.]

"Drawing" the retorts, at the end of every charge, is simple enough, but in consequence of the heat it is a severe task for the men. At the end of the proper period of distillation, generally six hours, the lids are removed simultaneously from both ends of each bench, the first access of air being attended with the explosion, in a voluminous flame, of the gas remaining in the retorts. The incandescent coke, much enlarged from the original bulk of the coal, and cohering in a single mass, has then to be quickly broken up and raked upon the retort house floor, iron rakes with long handles being employed in the work. The return of gas to the retorts is prevented by the self-sealing apparatus in the hydraulic main, to be presently described.

Before leaving the retorts we may notice that the formation of carbonaceous scurf upon their internal surfaces, once the cause of so much trouble in gasworks, is now greatly lessened, possibly in consequence of the general use of exhausting apparatus, whereby hardly any pressure is now maintained in the retorts above the ordinary pressure of the atmosphere. With retorts worked under a high pressure, the deposition of carbon goes on

rapidly. The use of double retorts opening at both ends has, furthermore, tended to prevent the accumulation of scurf, as, while the retorts are open for drawing and charging, the interrupted flow of air from end to end promotes the combustion of the carbon, thus keeping the internal surface of the retorts tolerably clear.

We may now follow the gas in its progress from the retort to the condensing and purifying apparatus. The stand pipes, or ascension pipes, from 4 in. to 6 in. in diameter, rise from the mouth pieces as already explained, a socket being cast on each mouth piece, in which the stand pipe is secured by a rust joint. There is almost always a stand pipe rising from each end of a double retort, although, in a few works, all the gas made in a 20 ft. retort has to find its way out at one end. Where cannel gas is made a good deal of pitch is deposited on the outsides of the stand pipes, and at the Western Gasworks, where the retorts are charged every four hours, the stand pipes need clearing out every time a charge is drawn.

By proper connections the stand pipes, which rise 5 ft. or 6 ft. above the top of the bench of retorts, are bent over and downwards so as to enter the hydraulic main, a tube from 18 in. to 30 in. in diameter, and extending for the entire length of the retort house, sometimes in front of the stand pipes, but more commonly behind them. Over a very large number of the retorts at the Pancras station of the Imperial Gasworks a single hydraulic main extends along the middle of the long range of benches, communicating with the ascension pipes from both ends of each retort. At the Surrey Consumers' works a single main is also used along the middle of the contiguous benches. This plan is not to be recommended, however, as if the main becomes obstructed, the whole works are stopped; whereas, with two mains to each range of retorts, the whole work can be thrown upon one while the other is being cleared out or repaired. In making cannel gas, at least at the Western Gasworks, the mains become choked with pitch in three or four months; whereas, with Newcastle coal, they would not require clearing out oftener than once in as many years. The use of a single main, therefore, in a cannel gaswork, would be attended with some inconvenience, and the long inclined ascension pipes, also required in that case, would cause additional trouble.

The hydraulic main was formerly made of cast iron, and many cast iron mains are still in use, and possibly some gas engineers still prefer them. They are now, however, very commonly made of wrought iron plates, $\frac{3}{8}$ in. in thickness. The Phoenix Company was among the first in London to employ wrought iron mains. Theirs are 2 ft. in internal diameter, being circular in section, with the exception of a flat seat at the top for the attachment of the pipes. At the Equitable, the Commercial, the Great Central, the Western, the Crystal Palace District, and, perhaps, at some others of the London gasworks, wrought iron hydraulic mains are also adopted. The main at the Western Gasworks is made square in section, with removable doors or lids on the back to allow of clearing out the pitch, the rapid deposition of which has already been noticed.

The hydraulic main is half filled, at first, with water, which is retained by a plate or weir fixed in the ends of the main in such a manner that, upon any addition to its liquid contents, the excess flows over, through a descending pipe, into a collecting vessel below. The tar brought with the gas from the

retorts soon displaces a part of the water, and sinks to the bottom of the main, the ammonia uniting with the rest and floating on the surface, as ammoniacal liquor. Ammonia is a gas formed by the combination of nitrogen with hydrogen, both constituents existing in coal. Water absorbs ammonia with great avidity, and thus it is that the greater part of the ammonia produced in the distillation of gas coal is arrested in the hydraulic main.

The dip pipes enter the top of the main through a tight joint and descend until their open mouths are $2\frac{1}{2}$ in. or 3 in. below the level of the ammoniacal liquor in the main. Thus the gas can only enter the main by displacing the liquid which, otherwise, would rise in the pipe to the same level of its inside as on its outside, and thus, too, when once in the main, the gas can not return to the dip pipe. This simple arrangement was devised we believe, by the late Mr. Clegg, and it does its author great credit. Known as the water joint, it is applied in the greater number of vessels employed in gas making, the tar trap, the condensers, the purifiers, and the gas holders, in all of which the gas is retained without the possibility of escape by the simple interposition of a few inches of water between the edge of one pipe or vessel and that of another surrounding or enclosing it.

From the hydraulic main to the condenser the gas passes simply through a pipe in connection with a tar trap for retaining the tar and ammoniacal liquor.

In most of the London gas works the gas passes from the main at once to the condenser, and afterwards to the exhauster, but at the City Gasworks, the London, the Phoenix, the South Metropolitan, and, possibly, some others, this order is reversed, the gas being exhausted directly from the main. At the several stations of the Chartered Gas Company both the condensers and scrubbers are placed between the main and the exhausters. We will, then, glance first at the condensers, in which the gas drops the tar and ammoniacal liquor, or as much of it at least, as escapes deposition in the hydraulic main. No one who has been over the nineteen gasworks of London would suppose that there was any sort of rule for the proportion between the condensing surface and the quantity of gas in motion. Something like five square feet of surface for every 1,000 ft. of gas made in twenty-four hours has been insisted upon by some engineers; but others, we believe, manage with less than one-fourth of the surface which this rule would allow. The greatest differences exist, also, in the mode in which the condensing surface is employed to cool the gas. Thus, at the South Metropolitan works, a circuit of perhaps 120 ft. or 150 ft. in length of 10-inch pipe is carried to and fro in a cistern of water so intersected by partitions as to produce a gentle flow of water in a direction opposite to that in which the gas is moving. The principle is the same as that of the refrigerators used by brewers for cooling worts. At all the other works vertical condensing pipes, exposed to the atmosphere, are employed, but in occasional instances, as at the Great Central and the Crystal Palace District works, hollow pipes are employed, with the air circulating both outside and inside an annular space; and at many works water is allowed to drip over the pipes, at least, while the sun is out. The pipes are generally coated with gas tar, both as a protection against rust, and because a black color is the best for a rapid radiation of heat. At the Pancras station of the Imperial Company the condenser consists of 10 columns or pipes, each 3 ft. 6 in. in diameter, and painted

red. There is, we are told, no internal air pipe, and water is allowed to trickle over the condenser while the sun is out. We believe that the whole make of gas at these great works, sometimes amounting to nearly 5,000,000 cubic feet in 24 hours, passes through this condenser, although its surface, we should suppose, hardly exceeds 3,500 feet. There are many gas engineers who now object to a rapid condensation of the gas, on the ground that more of the carbon is likely to be precipitated as tar, and the gas thereby impoverished. This view is taken, at least by engineers engaged in cannel gas making, and we believe it is shared to some extent by makers of ordinary gas.

The tar reservoirs below the condensing pipes are variously made. Sometimes, as at the Ratcliff Gasworks, a separate box is provided for each pair of pipes, but, more commonly, a long box is divided by partitions reaching down nearly to the bottom, the tar, contained in the box, preventing the direct passage of the gas from one division to another. The condensing apparatus which, properly performing a given amount of work, and having ample strength and durability, weighs the least, is, one would suppose, the best. The pipes are generally made as thin as they can be safely cast, and the tar boxes require but little more strength than suffices to prevent their being broken by accidental blows. The surface of the tar reservoir itself assists the cooling of the gas, but it is desirable to keep it of a moderate size. With thin castings, the partitions cast in to compel the gas to traverse the full circuit of the pipes no doubt afford a desirable stiffness to the boxes, but otherwise the condenser at the London Gasworks, Vauxhall, would be the simplest and, perhaps, the most preferable of those not having internal air pipes. Here the bottom box is made without division plates, each pair of pipes being connected, in the open air, by a band, from which a short pipe descends and passes through the cover of the box, well into the tar within.

In some of the old condensers, with two parallel circuits or rows of pipes, the gas going first through one row and returning by the other, the juxtaposition of a warm and a cold pipe upon the same division of the bottom box has been found objectionable, and hence, where two parallel rows of pipes are used, it is now preferred to take the gas up one pipe in one row and down another in the other row, so that the two pipes rising from any one division of the tar box may have, as nearly as may be, the same temperature.

All the joints about the condenser are made with flanges where required, the pipe joints being spigot and socket, made either with iron rust well caulked, or with yarn and lead.

[To be continued.]

AUSTRALIAN GOLD.—A return has just been issued, showing the quantity of gold exported from the several ports of Australia during 1859, 1860, and the first half of 1861. The total quantity exported from New South Wales during 1859 was 21,178 ozs., worth £81,504. Next year the quantity had risen to 31,830 ozs., worth £115,290; and in the first half of 1861 the quantity exported was no less than 35,441 ozs. The returns relating to Victoria show that the total quantity exported in 1859 was 2,280,525 ozs.; in 1860, 2,128,466 ozs.; and in the first half of 1861, 981,396 ozs. The estimated net quantity of gold exported from both colonies in the period between May, 1851, and June, 1861, is 25,081,468 ozs., and its value £96,399,884 18s.

THE FEATHERING SCREW PROPELLER.

The official trial of her Majesty's frigate Aurora took place at Plymouth on Friday, the 14th. instant. The trial of this ship was looked forward to with some interest in consequence of her being the first large vessel of war fitted with the feathering-screw propeller as invented by the late Mr. Joseph Maudslay. The Aurora is a 51 gun frigate of 2,558 tons, her length between perpendiculars is 227 feet, and her breadth of beam 50 feet. She is fitted with horizontal double piston-rod engines, of 400 horses nominal power, manufactured by Maudslay, Sons and Field, with cylinders of 64 inches diameter, with a stroke of three feet. The trial took place at the measured mile outside Plymouth and Breakwater, under the superintendence of Captain Key, of the Steam Reserve, Messrs Steel and Ward attending on the part of the Admiralty. The vessel not being rigged, or having her guns or stores on board, was at her light draft of 16'9 forward and 19'7 aft. The wind was of the force of 4 to 6 from the eastward. The trial was considered highly satisfactory, the speed the vessel attained being 11.33 knots, 61 being the mean number of revolutions of the engines, with a pressure of steam of 20 lbs. After six runs had been made at the measured mile with the engines working at their full power, two runs were made at half boiler power, when a speed of 8.216 knots was obtained, the engines making 45 revolutions per minute. The diameter of the screw is 17 feet, and it may be set at a minimum pitch of 17 feet 5 inches, from which position the angle of the blades can be varied till they are set in a fore and aft position. On the trial the blades were set at a pitch of 22 feet 6 inches. The alteration of the angle of the blades is effected from the quarter-deck of the vessel, and may be readily done while the screw is in motion at full speed; this was tested during the trial, when it was found that two men had perfect control over it. The advantages of this description of propeller are, first, that it enables the vessel to proceed under canvas alone, without the necessity of lifting the screw out of the water, thus avoiding the trouble, risk, and loss of time usually attending that operation when performed in a sea-way. This is accomplished by placing the blades fore and aft in a line with the keel, in which position they offer little or no resistance to the progress of the vessel, while at the same time they in a great measure fill up the aperture in the dead wood, which is found of the greatest advantage to the steering of the vessel when under sail alone, as it prevents the water rushing through the opening, and causes it to impinge upon the rudder. The second advantage is, that by altering the angle of the blades the pitch of the screw may be easily varied at pleasure to suit the different circumstances under which the vessel may be proceeding, which, of advantage on long voyages when sailing and steaming are combined, and admits of a great saving of fuel and a high speed of vessel being maintained. The whole of the apparatus for effecting these alterations is combined with the ordinary lifting frame, so that it may be easily examined at any time. Screws of this principle, with some difference of detail, were fitted amongst others, some years since, to the fine fleet of vessels built for the General Screw Steam Shipping Company, and were used with considerable success on the voyages to Calcutta and back, and were the means of effecting a great saving of fuel.—*London Engineer,*

MONEY AND COMMERCIAL.

The remarks of our last week's issue relative to the sound condition of the money market are equally applicable at the present time. Indeed the demand for money during the past week has rather diminished, and in all probability will continue to be less even than it is now until the opening of the fall trade, by which time, it is hoped, the political troubles will have been ended, and that the flow of trade will have once more a free channel.

Good paper is scarce, and sought after at rates varying from 6 to 12 per cent. The Exchange market has been without animation, and rates are irregular; the nominal drawing price being $\frac{1}{4}$ for bankers' checks, yet some transactions have been made as low as $\frac{1}{8}$ premium. The quotations are:

	Buying.	Selling.
New York.....	par	$\frac{1}{4}$ prem.
Boston.....	par	$\frac{1}{2}$ prem.
Philadelphia.....	par	$\frac{1}{4}$ prem.
Baltimore.....	par	$\frac{1}{4}$ prem.
Gold.....	2@2 $\frac{1}{2}$ prem.	3@3 $\frac{1}{4}$ pr

The condition of the New York money market is shown by the following from the Tribune: The supply on call is abundant at 4@5 per cent. on Government and other securities, and 3 per cent. on gold. Gold can be borrowed at about 2 per cent. interest. The market is well supplied with the precious metal, and some lots have come upon the market, the proceeds being invested in Custom-House Treasury Notes, on the theory that the two commodities will within a few months be nearly equal in value. Gold can now be sold at 3@3 $\frac{1}{2}$ per cent. prem., while the notes can be bought at $\frac{1}{2}$ @ $\frac{1}{4}$ per cent. prem. The old-issue Treasury Notes are widely distributed, and as the receipts at the Custom House will not hereafter be reissued, they must become comparatively scarce, and approximate more nearly to gold. Some parties who have faith in this theory, and wish to have the equivalent of gold hereafter, are realizing the present difference in the rates of premium.

In Railroad bonds, the market was excited, and a further considerable advance took place. Michigan Southern First mortgage sold at 100@100 $\frac{1}{2}$; Toledo Firsts at 90, and Seconds at 58. Chicago and North Western Assented Firsts, of which nearly 40,000 sold at the first Board at 41, were 43 bid. The Seconds were 24. Michigan Southern Seconds sold at 80 $\frac{1}{2}$. The registered business in railroad bonds today was \$225,000, which is larger than known for a long time. Besides these there have been large private transactions, generally at higher than board prices. Indeed, the speculation in railroad bonds was the feature of the street to day, and all descriptions were in demand at advancing prices. The market was very strong in the street late in the day, without many stocks offered for sale. The closing quotations were, Erie Preferred, 67; common, 39 $\frac{1}{2}$ @ $\frac{1}{4}$; Southern old, 26; Preferred, 55 $\frac{1}{2}$; Rock Island, 63 $\frac{1}{2}$ @66; Central, 89 $\frac{1}{2}$ @89 $\frac{1}{4}$; Pacific Mail, 114 $\frac{1}{2}$, &c.

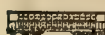
General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.

TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:30 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton
RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:40 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day, Toledo & Day, Huntsville.....	5:30 P. M.	1:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

If Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Terre Haute and Lafayette and Chicago Mail.....	5:05 A. M.	11:10 A. M.
Indianapolis and Chicago Night Express.....	3:30 P. M.	11:50 P. M.

Ohio and Mississippi Railroad.
CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

ns run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
u sville and St. Louis Mail.....	5:00 A. M.	10:45 P. M.
ymour Accommodation.....	3:00 P. M.	8:45 A. M.
uisville and St. Louis Night Ex.....	5:30 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

If Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

If Omnibuses call for passengers as usual.

General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

W. H. L. NOBLE.
General Ticket Agent Indianapolis & Cincinnati Railroad.
E. F. FULLER.
General Ticket Agent Ohio & Mississippi R. R.McCALLUM, BRISTOL & CO.,
BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct McCallum's PATENT INFLEXIBLE ARCHED TRUSS BRIDGE, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge and in the most approved and perfect manner. Parties desiring information, will please apply to the firm at their Office 99 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y. Ag. 26.

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CINCINNATI

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

NEW YORK, BOSTON,

AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

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This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSTHY, Freight Agent, 64 Clark Street, Chicago.

CHARLES MINOT, Gen'l Sup't.

Baltimore and Ohio Railroad

RE-OPENED!



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Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition, The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

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W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Baltimore, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.CHICAGO, GREAT WESTERN AND
NORTH-WESTERN LINE—INDIANA
POLIS AND CINCINNATI SHORT-LINE

RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati daily for the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M.; Chicago at 6:00 A. M., connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.

W. H. L. NOBLE,

General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

KNOX & SHAIN,
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RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCEN
NES, Cairo, and St. Louis.

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.

RETURNING.—Mail Train Leaves East St. Louis.—(Sundays excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M., arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office No. 5 East Third street; No. 1 Burnet House corner north-west corner of Front and Broadway; Spencer House Office; and at the Depot corner of Front and Mill Streets G. B. McCLELLAN, Gen'l Superintendent.

If Omnibuses call for Passengers,
November 11th, 1861.

1861.

1861

FAST TIME.

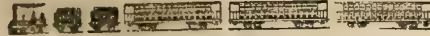
LITTLE MIAMI

AND

COLUMBUS AND XENIA

AND

CINCINNATI, HAMILTON & DAYTON



RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation—From Little Miami Depot.

3:30 P. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Richmond, Indianapolis and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express—From Cincinnati, Hamilton and Dayton Depot—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,

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Omnibuses call for passengers by leaving directions at the Ticket Offices.

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1862.

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Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

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FOR 1861

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In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

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Railroad Machinery, Tires, etc.

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, MAY 29, 1862.

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If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—		Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.	
Mail and Express.....	10.00 A. M.	10.30 P. M.	
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.	
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.	
Cincinnati, Hamilton & Dayton—			
Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.	
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.	
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.	
Richmond & Dayton.....	2.00 P. M.	10.10 A. M.	
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.10 A. M.	
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.	
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.	
Eastern Night Express.....	10.00 P. M.	8.10 A. M.	
Sandusky, Dayton & Cincinnati—			
Morning Express.....	6.00 A. M.	5.40 A. M.	
Bellefontaine Accommodation.....	5.20 P. M.	6.45 P. M.	
Marietta & Cincinnati—			
Mail.....	8.00 A. M.	5.20 P. M.	
Accommodation.....	3.30 P. M.	10.00 A. M.	
Ohio & Mississippi—			
Mail.....	5.05 A. M.	10.05 P. M.	
Seymour Accommodation.....	3.00 P. M.	8.45 A. M.	
Express.....	5.00 P. M.	6.53 A. M.	
Indianapolis & Cincinnati—			
Mail.....	5.05 A. M.	11.10 A. M.	
Chicago Express.....	3.20 P. M.	11.50 P. M.	
Dayton & Michigan—			
Toledo, Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.	
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.	
Cincinnati & Chicago Air Line—			
Mail and Express.....	7.30 A. M.	9.40 P. M.	
Night Express.....	7.00 P. M.	10.10 A. M.	
Cincinnati, Wilmington and Zanesville—			
Morning Express.....	10.00 A. M.	4.20 P. M.	
Accommodation.....	6.00 P. M.	8.00 A. M.	
Kentucky Central— (City time.)			
First Train.....	7.00 A. M.	10.45 A. M.	
Second Train.....	2.00 P. M.	6.40 P. M.	

NATIONAL FINANCES—TAXATION.

The national finances exhibit at the present time a very extraordinary appearance. After a year's civil war of unparalleled extent, and of vast expenditure, we find the national finances in a very healthy and satisfactory condition—with the Government stocks at or above par, and the people pressing their money upon the Treasury at the lowest rate of interest ever known in this country. And all, too, without any aid whatever from foreign capitalists. This state of affairs can not be otherwise than gratifying to every friend of free and liberal governments—giving evidence, as it does, of the ability of people to govern themselves, and to maintain that government by the two Great Powers of the earth—the purse and the sword.

We find now and then persons of nervous temperament, and perhaps *secession*, or more properly *traitorous*, proclivities, who express their fears at an accumulating national debt; or shake their heads ominously at the financial prospects ahead. But these fears are idle. This country, as a nation, will be vastly benefitted by the present war; for thereby will be solved, favorably, several great problems in regard to self-government, which nothing but just such an insurrection could solve.

A heavy national debt is not the most desirable thing for a nation; but, then, such a debt is not the greatest misfortune that can befall a people. A heavily burdened exchequer begets economy, and economy begets thrift, and thrift begets industry, and industry many more good things. Besides, it will insure for us a better order of statesmen and public officers—two things much needed, and greatly longed for.

The effect to be produced upon the country by an increase of the public debt can not readily be estimated. The issue of treasury notes, however, must be felt very efficiently in all departments of business; for it adds so much to the actual cash capital of the country. Besides, it will give us a national currency, as good as the government and at par everywhere, for the old bank notes of uncertain and constantly fluctuating value.

Let us look at this matter a little in detail. There are in the United States about 1,400 banks of issue, with an aggregate capital of four hundred millions of dollars—a circulation of two hundred millions, and a specie basis of seventy five millions. These banks have, until recently, furnished the entire circulating medium of the country, and have made directly or indirectly on this circulation, not less than twelve millions annually, while by the failure of banks, the depreciation of paper, frauds, etc., the people have suffered probably to the yearly extent of ten millions more. These seem like large sums to pay for the privilege of having “bank rags” for a circulating medium; and so they are, but the

facts will bear us out in the calculation. This, however, will now be changed. In place of “bank rags” we shall have treasury notes—as good as gold—for which we shall not have to pay twenty or thirty millions per annum, in the way of interest, depreciation, bank failures, frauds, bogus issues, etc., etc. This one result alone—did we gain nothing else by the war, save a restoration of the government—would be ample compensation for the burdens that may be forced upon us.

The mode by which the government taxes are to be raised, is really the great question growing out of the war, so far as our national finances are concerned; for none can doubt the ability, or willingness, of our people to pay whatever tax may be necessary for the support of the government. But how, or in what way the hundred and fifty millions necessary for the next year's support is to be raised, is a question not as easily solved as casual observers might suppose. True, it is only five dollars per head on the thirty millions of inhabitants; but a *per capita* tax of that amount would fall very heavily on the poor, who are always blessed with more children than the rich, and who are much less able to pay. Such taxation, therefore, would be unjust or unequal.

The cumbersome bill now before Congress for an excise tax, does not strike us favorably, nor as the most feasible mode of raising the required amount of revenue. The expenses, the troubles, the frauds, and botherations arising out of it would be endless; besides, it is doubtful whether the needed amount could be raised by it. Property is unquestionably the real basis of taxation, and the more simple and direct the mode by which the tax is levied and collected the more satisfactory, and the less the tax, and the larger the amount realized by the treasury. It will make but little difference to a man's pocket, if he has a hundred dollars taxes to pay, whether it is assessed as so much per cent on all his property, or whether he pays the half of it on the income from it, and the remainder in small assessments on its several small parts; but it will make a great difference in the expenses of assessment and collection, and in the ten thousand annoyances growing out of excise, income tax-laws like those in force in England.

In our paper of the 1st inst, we gave the memorial of the New York Chamber of Commerce on the tax question, in which it was proposed to limit the subjects of taxation to seven, to-wit:

All sales of merchandise,
Excise tax on cotton,
“ “ tobacco,
“ “ whisky,
“ “ malt liquors,
Tariff on imports,
Direct tax on real and personal property.

To a certain extent this is an improvement on the bill before Congress. It has its objections, however, not the least of which is that

it taxes a *part* of the products of the soil, and not the *whole*.

This measure contemplates a direct tax levied as State taxes now are. It strikes us that it would be better to make the whole tax direct, and thus reduce the matter to its simplest elements. The property of a country, or more properly speaking, the *labor* represented by the property, must pay the tax in the end, and the burthen will only be increased by any *indirect* mode, however specious, that may be adopted.

We have not at hand any reliable estimate of the value of real or personal property in the United States; but there can be little doubt that a direct tax of not exceeding one per cent., perhaps half would be sufficient, would give a greater revenue, and one less felt by the people at large, than the cumbersome, obnoxious and troublesome measure now before Congress. At the same time a tax of the kind could be collected at small expense and in one-half the time of any other, and it would fall more equally and upon those who could best afford to pay it. If slaves are regarded as *property*, (and those who own them claim that they are), and taxed at *half* their market value, the percentage of tax on other property would be so small as scarcely to be felt as a burthen by anybody.

PITTSBURGH, FORT WAYNE & CHICAGO RAILROAD COMPANY.

We have received from Th. D. Messler, Esq., Auditor, the fifth annual report of the Pittsburgh, Fort Wayne & Chicago Railroad Company, which shows the affairs of that company in a very favorable light.

The total earnings for the year 1861 are as follows:

From transportation of local freights, \$421,433 87; for n fr'ghts, \$481,273 48; local passengers, \$483,359 48; foreign passengers, \$419,376 98; express matter, \$33,482 82; mails, \$93,900; from rent of railway, \$84,939 44; rents of other property, \$4,843 08; miscellaneous sources, \$6,207 46,..... \$3,031,787 51
Total earnings for the year '60, 2,335,353 83

Increase, (29 87-100 per cent.),.... \$ 696,433 68

The expenses during the same time were:

For conducting transportation, \$500,981 14; motive power, \$598,226 06; maintenance of way, \$435,824 53; of cars, \$146,858 40; general expenses, \$50,176 33,..... \$1,732,066 46
Expenses for the year 1860,..... 1,573,798 87
Increase, (10 5-100 per cent.),..... \$ 158,267 59

The increase in the earnings were as follows, to-wit:

Increase in earnings from foreign freights, \$638,960 53, (or 75 5-10 per cent.); local passengers, \$47,889 76, (11); foreign passengers, \$49,380 66, (13); express matter, \$2,182 82, (7); rent on railway, \$1,130 11, (1 35-100); miscellaneous, \$2,440 57, (64 80-100),..... \$ 741,924 43

Less decrease in earnings from local fr'ght, \$42,957 97, (or 9 8-10 per cent.); rents of property, \$2,532 80, (34 8-10),..... 45,490 77

Net increase, (29 9-10 per cent.),... \$696,433 68

The increase in the expenses were:

For conducting transportation, \$168,472 47, (or 50 67-100 per cent.); motive power, \$64,877, (12 17-100); general expenses, \$3,534 75, (7 58-100),..... \$ 236,884 23

Less decrease for maintenance of way, \$74,754 81, (or 14 64-100 per cent.); of cars, \$3,861 83, (2 56-100),..... 78,616 64

Net income, (10 5-100 per ct.),.... \$ 158,267 59

The increase in expenses of conducting transportation is more than equivalent to the increase in the earnings, but as the expenses connected with the transfer of through freight in Pittsburgh, in 1860 deducted from earnings, were in 1861 charged to expenses, the ratio of this class of expenses to earnings may, thereby, be reduced; yet with this deduction the expenses for conducting transportation per mile run by engine and per mile run by cars, exceeds that of the previous year.

The increase in the expenses of motive power is much below the increased mileage of trains run. The number of miles run in 1860 was 1,984,501, and in 1861 2,434,641, being an increase in 1861 of 486,140 miles, or about 20 per cent. The increase in the expenses of motive power was only 12 17-100 per cent., as shown above.

General expenses shows an increase of \$3,534 75. This occurred in the legal department of the company's service. The increased expense in this department was \$5,971 32, and the difference between this sum and the net increase of general expenses is accounted for by a reduction of expenses in the general offices.

The reduction of expenses of maintaining the way occurred entirely on the Eastern Division, by reason of the heavy renewals of iron rails, cross-ties, etc., in 1860. The decrease in this department on the Eastern Division was \$110,962 58, the increase having been \$36,207 77 on the Western Division,

A much larger reduction in the expenses of maintenance of cars has occurred than is apparent by the foregoing statement. The total mileage of car in 1861 was 22,646,634 miles, and in 1860, 17,024,279 miles, showing an increase in 1861 of 5,622,355 miles. The cost of maintenance of cars per mile run in 1861 was 6½ mills, and in 1860 a fraction less than 9 mills, being a decrease of nearly 2½ mills, equal on the whole mileage to a reduction in this class of expenses of \$53,637 96, or 35½ per cent.

The following statement may, also, be of interest in connection with expenses:

Gross earnings per mile of railway,.....	\$6,492 05	1861.	\$5,000 76	1860.
Net earnings,.....	2,775 84		1,630 74	
Expenses,.....	3,708 92		3,379 02	

Gross earnings per mile run by eng's.	1 31 8-10	1 29 3-10
Net earnings,.....	56 9-10	42 2-10
Expenses,.....	75 8-10	87
Gross earnings per mile run by cars,	13 4-10	13 7-10
Net earnings,.....	05 7-10	04 5-10
Expenses,.....	07 6-10	09 2-10
Percentage on earnings absorbed by expenses,.....	57 2-10	67 4-10

In the freight traffic the most profitable business was done in the westward movement, and it is a noticeable fact that, although the tonnage in this direction increased only about four per cent., the revenue was augmented nearly 27 per cent. This is partly owing to the increased length of the average haul, but chiefly to the addition of 5 mills to the rate per ton per mile, over that obtained the previous year. Had the same average rate been obtained on the eastward, as on the westward business, the freight earnings would have been still further increased by the amount of \$342,301 81. The average rate obtained on the westward business was two cents per ton per mile, and on the eastward one and one-half cents. The latter shows a very slight increase of less than one mill per ton per mile.

The passenger business also shows considerable improvement, independently of the troops carried for the Government, which would not exceed 20 per cent. of the increase.

The total number of all classes transported was 541,251½, of which 457,050 were local, and 84,201½ were through, or foreign passengers, exhibiting an increase of 92,448 in the local, and 12,139½ in the foreign travel. Of the number of local passengers 271,266 were carried in the first-class trains; 689 in second-class trains, and 185,094 in accommodation trains. Of the foreign passengers, 73,696 were carried in first-class trains, 5,225 in second-class trains, and 5,281 in emigrant trains. The rate obtained for local first-class passengers was 2 9-10 cents per mile per passenger; the reduction from the regular fare having been caused by the company being obliged to carry troops in first-class cars at 2 cents per mile per man. The rate of second-class local passengers was 2 2-10 cents per mile, and for accommodation train passengers the same rate. For first-class foreign travel an average rate of 2 4-10 cents per mile was obtained; for second class 1 6-10 cents, and for emigrant travel 1 4-10 cents per mile per capita.

The movement of local passengers was 223,033 eastward, and 234,017 westward. The revenue from local passengers, which was \$483 329 48, shows an increase of \$47,889 76, of which \$29,892 04 was in the eastward, and \$17,977 72 in the westward movement. This increase was caused entirely by the increase in the number of passengers carried, the average trip having been less, and the rate obtained, also, less.

The movement of the foreign travel was,

eastward 45,576½ passengers, and westward 38,625½ passengers.

An increase of 12,139½ foreign passengers is shown and a proportionate increase in the revenue. The increase in the eastward travel was 6,418 passengers, and in the westward travel 5,722 passengers.

The total revenue from foreign travel amounted to \$419,376 98, and a gain of \$49,330 66 is shown therein. Of this amount \$43,346 73 resulted from the eastward, and \$5,983 93 from the westward travel. The rate on the eastward foreign passengers was 2 8-10 cents per mile, and on those going westward but 2 2-10 cents.

The financial condition of the company is given as follows:

Total cost of railway, equipment, etc., to date,.....	\$17,002,121
Real estate,.....	768,567
Cash,.....	176,813
Stock and bonds,.....	31,408
Unapplied materials,.....	295,965
Other available assets,.....	583,211
Other unavaiable assets,.....	91,492
Total,.....	\$18,949,581

Capital stock and scrip, ...	\$ 6,249,433
Funded debt,.....	10,264,995
Certificates (convertible),.....	126,544
Floating debt,.....	1,847,328
Current liabilities,.....	340,612
Income account,.....	120,669
Total,.....	\$18,949,581

In regard to the liabilities of the company, the Auditor says: "A large proportion of the floating debt has been settled since the last summer, by the issue of certificates of the Purchasing Committee to the amount of \$124,787 88, entitling the holders to convert them, at par, into the Third Mortgage Bonds of the re-organized company. These certificates were issued for the principal and interest of all construction claims, and for three-fourths of the principal and interest of all claims incurred, prior to the suspension of the company, for transportation purposes, the remaining one-fourth of the latter have been paid in cash. This arrangement, while not absorbing an undue amount of revenue, has been generally satisfactory to the holders of unsecured claims, especially since it has been made apparent to them that the interest on the Third Mortgage Bonds will be paid in a short time, and in this wise imparting a marketable value to the bonds."

There has been retired during the year \$486,368 70 of the floating debt by the issue of bonds, certificates, and small payments in cash.

By the addition of the unpaid interest on the bonds, matured during the year, amounting to \$606,535, provisions for the payment of which is made by its conversion into the bonds of the re-organized company, the floating debt, which stood \$1,727,161 52, December 31, 1860, has been increased, at the close of the past year, to \$1,847,327 82, being a net increase of \$120,166 30. Practically, how-

ever, it has been reduced, by the before mentioned payments, and the provision for the redemption of the matured coupons, to \$328,115 32.

This amount is about five per cent. of the capital stock. The cash in hand and cash assets were more than sufficient to extinguish this debt, part of which is not matured, together with the remaining current liabilities. By the terms of the agreement, however, under which the re-organization is to be effected, the greater portion of this debt is to be funded into the Second and Third Mortgage Bonds of the new company. Since the 1st of January a large amount of it has been so redeemed.

The current liabilities, outstanding at the close of the year, which include the expenditures made in December for the operation and maintenance of the railway, structures and equipment, payable in January, were increased \$78,267 33; and this increase is entirely due to the extended business of the company, and the unsettled accounts with the Government. The accounts payable to other companies, etc., show, alone, an increase of \$50,027 69.

In conclusion, the Auditor remarks, that "the most gratifying and interesting feature of the year's business is the exhibit made in the Income account; and to me it is a source of no little pleasure to announce to the Board of Directors the entire absorption of the previous losses, incurred in the operation of the line since the consolidation, by the profits of the last year, and the carrying forward of a surplus of \$120,669 15. And this establishes the correctness of the opinion, so often reiterated in former reports of the company, but discredited or doubted by some, that the investment made by the shareholders in this enterprise would, upon the completion and perfection of the line and its appointments, yield them ordinary dividends.

THE HOMESTEAD BILL.

The following is the Homestead Bill, as passed by the Senate and agreed to by the House of Representatives. It is a measure of great importance, and has long attracted considerable attention from the country at large:

AN AOT To secure homesteads to actual settlers on the public domain, and to provide a bounty for soldiers in lieu of grants of the public lands.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That any person who is the head of a family, or who has arrived at the age of twenty-one years, and is a citizen of the United States, or who shall have filed his declaration of intention to become such, as required by the naturalization laws of the United States, and who has never borne arms against the United States government or given aid and comfort to its enemies, shall, from and after the first of January, eighteen hundred and sixty-two, be entitled to enter one quarter section of unappropriated public lands, upon which said person may have filed a pre-emption claim, or which may, at the time the application is made, be subject to

pre-emption at one dollar and twenty-five cents, or less, per acre; or eighty acres of such unappropriated lands, at two dollars and fifty cents per acre, to be located in a body, in conformity to the legal subdivisions of the public lands, and after the same shall have been surveyed.

SEC. 2. *And be it further enacted,* That the person applying for the benefit of this act shall, upon application to the register of the land office in which he or she is about to make such entry, make affidavit before the said register or receiver that he or she is the head of a family, or is twenty-one years or more of age, and that he has never borne arms against the government of the United States or given aid and comfort to its enemies, and that such application is made for his or her exclusive use and benefit, and those specially mentioned in this act, and not either directly or indirectly for the use or benefit of any other person or persons whomsoever; and upon filing the said affidavit with the register or receiver, and on payment of ten dollars, he or she shall thereupon be permitted to enter the quantity of land specified: *Provided, however,* That no certificate shall be given or patent issued therefor until the expiration of five years from the date of such entry; and if, at the expiration of such time, or at any time within two years thereafter, the person making such entry—or if he be dead, his widow; or in case of her death, his heirs or devisee; or in case of a widow making such entry, her heirs or devisee, in case of her death—shall prove by credible witnesses that he, she, or they have resided upon or cultivated the same for the term of five years immediately succeeding the time of filing the affidavit aforesaid, and shall make affidavit that no part of said land has been alienated, and that he has borne true allegiance to the government of the United States; then, in such case, he, she, or they, if at that time a citizen of the United States, shall be entitled to a patent, as in other cases provided for by law: *And provided, further,* That in case of the death of both father and mother, leaving an infant child, or children, under twenty-one years of age, the right and fee shall enure to the benefit of said infant child or children; and the executor, or administrator, or guardian may, at any time within two years after the death of the surviving parent, and in accordance with the laws of the State in which such children for the time being have their domicile, sell said land for the benefit of said infants, but for no other purpose; and the purchaser shall acquire the absolute title by the purchase, and be entitled to a patent from the United States, on payment of the office fees and sum of money herein specified.

SEC. 3. *And be it further enacted,* That the register of said land office shall note all such applications on the tract books and plats of his office, and keep a register of all such entries, and make return thereof to the General Land Office, together with the proof upon which they have been founded.

SEC. 4. *And be it further enacted,* That no land acquired under the provisions of this act shall in any event become liable to the satisfaction of any debt or debts contracted prior to the issuing of the patent therefor.

SEC. 5. *And be it further enacted,* That if, at any time after filing the affidavit, as required in the second section of this act, and before the expiration of the five years aforesaid, it shall be proven, after due notice to the settler, to the satisfaction of the register of the land office, that the person having filed such affidavit shall have actually changed his

or her residence, or shall have ceased to occupy said land for more than six months at any time, then and in that event the land so entered shall revert to the government.

SEC. 6. *And be it further enacted*, That no individual shall be permitted to acquire title to more than one quarter section under the provisions of this act; and that the Commissioner of the General Land Office is hereby required to prepare and issue such rules and regulations, consistent with this act, as shall be necessary and proper to carry its provisions into effect; and that the registers and receivers of the several land offices shall be entitled to receive the same compensation for any lands entered under the provisions of this act that they are now entitled to receive when the same quality of land is entered with money, one-half to be paid by the person making the application at the time of so doing, and the other half on the issue of the certificate by the person to whom it may be issued; but this shall not be construed to enlarge the maximum of compensation now prescribed by law for any register or receiver: *Provided*, That nothing contained in this act shall be so construed as to impair or interfere in any manner whatever with existing pre-emption rights: *And provided, further*, That all persons who may have filed their applications for a pre-emption right prior to the passage of this act shall be entitled to all privileges of this act.

SEC. 7. *And be it further enacted*, That the fifth section of the act entitled "An act in addition to an act more effectually to provide for the punishment of certain crimes against the United States, and for other purposes," approved the third of March, in the year eighteen hundred and fifty-seven, shall extend to all oaths, affirmations, and affidavits, required or authorized by this act.

SEC. 8. *And be it further enacted*, That nothing in this act shall be so construed as to prevent any person who has availed him or herself of the benefit of the first section of this act from paying the minimum price, or the price to which the same may have graduated, for the quantity of land so entered at any time before the expiration of the five years, and obtaining a patent therefor from the government, as in other cases provided by law, on making proof of settlement and cultivation as provided by existing laws granting pre-emption rights.

The new bonds of the Terre Haute & Alton, and the Belleville & Illinoistown Railroad will bear date, June 2, 1862, and will represent the bond and accumulated interest under the first mortgage, amounting in all to about 120 per cent. for each old bond. In other words, the purchaser of a bond to-day at 106, will receive for two coupons \$70 in cash and \$1,200 in a new second-mortgage bond—equal to about 82½ per cent. for the new bond. On second-mortgage bond there is even a greater accumulation of interest, and the purchaser of a bond at the price of to-day—75 per cent., will get about \$1,600 for each bond, making the new bond stand in at about 46 per cent.

The Michigan Central Road earned the first week in May:

1862, ...\$44,161 41
1861, ... 36,288 79

Increase, ... \$ 7,872 62

CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD.

The annual meeting of the stockholders of this company took place at Lancaster, on Tuesday of last week. The reports of the officers were read. The statement of earnings and expenses was made by the Receiver. The following is the synopsis:

The gross earnings of the road for the year ending May 1 were,.....\$194,141 03
Expenses for working the road,..... 125,945 22

Net earnings,.....\$69,095 81
Or 64½ per cent. of earnings.

The number of local passengers carried was 57,029, and the receipts, \$18,501 14. The number of foreign passengers, 9,755, and the receipts were \$14,937 22.

CASH receipts and disbursements for the year;

RECEIPTS.

In hands of Receiver, May 1, 1861, \$38,708 80; from passengers, mail and express, \$70,503 58; freight, \$90,390 74; foreign roads on transportation acc'ts, \$26,943 95; other sources, \$104 16; rents, \$143, ...\$226,794 23

DISBURSEMENTS.

For E. Gest, Receiver, \$54 26; supplies and service, \$163,939 63; Am't paid president, directors and company, as per order of court, \$1,350; paid G. S. Coe, trustee, per order of court, \$796 07; paid on old claims, \$2,468 08; paid attorney's fees, \$1,363 85; paid foreign roads, \$4,362 66; balance on hand, \$52,459 70, ...\$226,794 23

COMPARATIVE statement of earnings and expenses for the year ending April 30, 1861 and 1862.

EARNINGS.

	1860-61.	1861-62.
May, ...	\$14,504 23	\$13,655 84
June, ...	14,019 30	13,802 92
July, ...	14,627 66	11,374 88
August, ...	18,759 38	12,869 95
September, ...	22,332 74	18,525 79
October, ...	22,079 51	17,821 24
November, ...	16,471 04	16,042 68
December, ...	16,600 40	20,150 55
January, ...	18,715 66	19,683 63
February, ...	12,601 57	16,042 68
March, ...	15,311 73	13,077 03
April, ...	15,879 67	14,452 60
Total, ...	\$202,402 89	\$188,015 74

EXPENSES.

May, ...	\$13,346 33	\$12,548 43
June, ...	14,467 88	14,573 13
July, ...	12,456 33	13,814 30
August, ...	14,107 33	14,060 80
September, ...	17,009 06	12,146 81
October, ...	13,705 77	13,577 58
November, ...	17,199 79	12,724 80
December, ...	12,654 64	16,626 89
January, ...	18,368 21	14,965 03
February, ...	10,326 66	13,408 24
March, ...	11,597 41	12,060 79
April, ...	12,863 31	12,465 43
Total, ...	\$168,102 22	\$162,968 27

The Rock Island Road earned the same week:

1862, ...\$22,400
1861, ... 22,900

Decrease, ... \$ 500

R. R. LEGISLATION IN IOWA.

AN ACT to require Officers of Railroad Companies to reside within the State of Iowa, and defining their duties.

SECTION 1. *Be it enacted by the General Assembly of the State of Iowa*, That the Secretary and Treasurer, or Assistant Treasurer, and General Superintendent of each and every Railroad Company now or hereafter organized under the laws of this State, elected after the passage of this act, shall reside in the State of Iowa.

SEC. 2. That the office of Secretary and Treasurer or Assistant Treasurer and General Superintendent of every such Railroad Company, shall be established and kept within the State, at the place designated in the charter as the general business office of such Company, at which office or offices the original record, stock and transfer books, and all the original papers and vouchers necessary to such Company shall be kept; and it is hereby made the duty of the Treasurer or Assistant Treasurer to keep a record of the whole financial condition of said Company, which shall be open at all reasonable hours for the inspection of any stockholders of such Company and any investigation instituted by the Legislature of this State.

SEC. 3. That every such Railroad Company shall annually, under the oath of its President, in the month of January, make a full report of the condition of its affairs to the Secretary of State, and shall have the same published in some newspaper printed in the place of its general business office, showing the amount of the Capital Stock of such Company, and the amount paid thereon; the amount of bonds issued and how secured, and all other indebtedness; the length of such Railroad when completed, and how much is built and in use; the number of acres of land donated or granted to them, and by whom, and what disposition has been made of said grants or donations; the gross amount of receipts, and how disbursed; the net amount of profits, and the dividends made, with such other facts as may be necessary to a full statement of the affairs and condition of such Railroad, and the Secretary of State shall present the said reports to the General Assembly.

SEC. 4. In case any such Railroad Company shall neglect to make such report as required in the preceding section, any stockholder of such Railroad Company, either individual or municipal, may file his petition in the District Court in the county where the principal business office of such Railroad Company is kept, stating that such report has not been made, praying that a peremptory writ of mandamus may issue against the said Railroad Company, commanding them to make said report; said petition shall be under oath, and filed at least ten days before the next term of the District Court in said county; and notice thereof shall be given to the said Railroad Company for the same length of time and in the same manner as is now required to be given defendants in other suits originally brought in the District Court; and upon the filing of such petition, the Clerk of said District Court, under the seal thereof, shall issue a peremptory writ of mandamus against the said Railroad Company, and make the same returnable at the next term of the District Court in said county; and costs shall be recoverable by either party, as in ordinary actions.

SEC. 5. If such Railroad Company shall fail to obey said writ as therein required the said Court shall during the term appoint three disinterested and competent persons living near

the place of the general business office of said Railroad Company, as an investigating committee, who shall examine into the affairs of said Railroad Company, and report at as early a day as practicable, its condition, in manner and form as prescribed in section three of this act; one copy of said report to be filed in the office of the Clerk of the District Court of the county where the proceedings are had, and one copy to be filed in the office of the Secretary of State; the compensation for the services of such committee shall be paid by the Railroad Company thus investigated, which shall not exceed three dollars per day, and mileage at the rate of ten cents per mile, counting one way.

SEC. 6. The Board of Directors of any such railroad company may establish in any other State a transfer office, in which shall be kept a duplicate transfer book; but in no case can a transfer of shares of stock in such company be in force or binding, until the same is entered in the original transfer book, in the office in this State.

SEC. 7. All acts and parts of acts inconsistent herewith are hereby repealed.

SEC. 8. This act being deemed of immediate importance by the General Assembly, it shall take effect and be in force from and after its publication in the Iowa State Register and Des Moines Daily Times, newspapers published at Des Moines, Iowa.

JAS. H. ROTHROCK,

Speaker pro tem. of House of Representatives.

JOHN R. NEEDHAM,

President of the Senate.

Approved April 8th, 1862.

SAMUEL J. KIRKWOOD,

I hereby certify that the foregoing is a true copy from the original roll on file in my office.

ELIJAH SELLS,

Secretary of State.

THE PROPOSED TAX ON RAILROADS.

The following are the sections of the proposed tax bill adopted by the Senate committee of finance, applying to railroads. They differ materially from the House bill, and it is to be hoped they will be adopted as the substitute:

Be it further enacted, That on and after the first day of July, eighteen hundred and sixty-two, any person or persons, firms, companies, or corporations, owning or possessing, or having the care or management of any railroad or railroads upon which steam is used as a propelling power, shall be subject to and pay a duty of three per centum on the gross amount of all the receipts and income of such railroad or railroads for the transportation of passengers over and upon the same; and any person or persons, firms, companies, or corporations, owning or possessing, or having the care or management of any steamboat, or other vessel propelled by steam power, or owning, possessing, or having the care or management of any ferry-boat, or vessel used as a ferry-boat, propelled by steam or horse power shall be subject to and pay a duty of three per centum upon the gross receipts and income of such railroad, steamboat, vessel, or ferry-boat, respectively, for the transportation of passengers over and upon said railroads, steamboats, vessels, and ferry-boats respectively; and any person or persons, firms, companies, or corporations, owning, pos-

sing, or having the care or management of any bridge authorized by law to receive toll for the transit of passengers, beasts, carriages, teams, and freight of any description over such bridge, shall be subject to and pay a duty of three per centum on the gross amount of all their receipts and income for passengers and freight of every description. And the owner, possessor, or person or persons having the care and management of any such railroad, steamboat, ferry-boat, or other vessel, or bridge, as aforesaid, shall, within five days after the end of each and every month, commencing as hereinbefore mentioned, make a list or return to the assistant assessor of the district within which such owner, possessor, company, or corporation may have his or its place of business, or where any such railroad, steamboat, ferry-boat, or bridge is located or belongs, respectively, stating the gross amount of such receipts for the month next preceding, which return shall be verified by the oath or affirmation of such owner, possessor, manager, agent, or other proper officer, in the manner and form prescribed from time to time by the Commissioner of Internal Revenue, and shall also, monthly, at the time of making such return, pay to the collector or deputy collector of the district the full amount of duties which have accrued on such receipts for the month aforesaid; and in case of neglect or refusal to make said lists or return for the space of five days after such return should be made as aforesaid, the assessor or assistant assessor shall proceed to estimate the amount received and the duties payable thereon, as herein before provided in other cases of delinquency to make return for purposes of assessment; and for the purpose of making such assessment, or of ascertaining the correctness of any such return, the books of any such person, company, or corporation shall be subject to the inspection of the assessor or assistant assessor on his demand or request therefor; and in case of neglect or refusal to pay the duties as aforesaid when the same has been ascertained as aforesaid for the space of five days after the same shall have become payable, the owner, possessor, or person having the management as aforesaid, shall pay, in addition, five per centum on the amount of such duties; and for any attempt knowingly to evade the payment of such duties, the said owner, possessor, or person having the care or management as aforesaid, shall be liable to pay a penalty of one thousand dollars for every such attempt, to be recovered as provided in this act for the recovery of penalties; and all provisions in this act in relation to liens and collections by distraint not incompatible herewith shall apply to this section and the objects therein embraced: *Provided*, That all such persons, companies, and corporations shall have the right to add the duty or tax imposed hereby to their rates of fare whenever their liability thereto may commence, any limitations which may exist by law or by agreement with any person or company which may have or be liable to pay such fare to the contrary notwithstanding.

RAILROAD BONDS.

SEC. [77] 80. *And be it further enacted*, That on and after the first day of [May,] July, eighteen hundred and sixty-two, any person or persons owning or possessing, or having the care or management of any railroad company or corporation, being indebted for any sum or sums of money for which bonds or other evidences of indebtedness have been issued, payable in one or more years after date, upon which interest is, or shall be, stipulated to be paid, or coupons representing

the interest shall be or shall have been issued to be paid, and all dividends in scrip or money or sums of money thereafter declared due or payable to stockholders of any railroad company, as part of the earnings, profits, or gains of said companies, shall be subject to and pay a duty of three per centum on the amount of all such interest or coupons or dividends whenever the same shall be paid; and said railroad companies or railroad corporations, or any person or persons owning, possessing, or having the care or management of any railroad company or railroad corporation, are hereby authorized and required to deduct and withhold from all payments made to any person, persons, or party, after the first day of May, as aforesaid, on account of any interest or coupons or dividends due and payable as aforesaid, the said duty or sum of three per centum; and the duties deducted as aforesaid, and certified by the president or other proper officer of said company or corporation, shall be a receipt and discharge, according to the amount thereof, of said railroad companies or railroad corporations, and the owners, possessors, and agents thereof, on dividends and on bonds or other evidences of their indebtedness, upon which interest or coupons are payable, holden by any person or party whatsoever, and a list or return shall be made and rendered within thirty days after the time fixed when said interest or coupons or dividends become due or payable, and as often as every six months, to the Commissioner of Internal Revenue, which shall contain a true and faithful account of the duties received and chargeable, as aforesaid, during the time when such duties have accrued or should accrue, and remaining unaccounted for; and there shall be annexed to every such list or return a declaration under oath or affirmation, in manner and form as may be prescribed by the Commissioner of Internal Revenue, of the president, treasurer, or some proper officer of said railroad company or railroad corporation, that the same contains a true and faithful account of the duties so withheld and received during the time when such duties have accrued or should accrue, and not accounted for; and for any default in the making or rendering of such list or return, with the declaration annexed, as aforesaid, the person or persons owning, possessing, or having the care or management of such railroad company or railroad corporation, making such default, shall forfeit, as a penalty, the sum of five hundred dollars; and in case of any default in making or rendering said list, or of any default in the payment of the duty, or any part thereof, accruing or which should accrue, the assessment and collection shall be made according to the general provisions of this act.

MANUFACTURE OF IMITATION RUSSIA SHEET-IRON.—The manufacture of sheet-iron, in imitation of the celebrated Russian article, which has heretofore been so extensively used in this country, is being carried on to a very considerable extent at the iron works at Conshohocken, and one or two others in the State of Delaware. The article is made by a new process, falling under three different patents. It is a close imitation of the Russian fabric, very soft, durable, of great tenacity and ductility, and costs fifty per cent. less than the foreign. The iron is used mostly for the manufacture of parlor stoves, stove pipes covering locomotive jackets, &c. Last year, nearly as much was used in this country as of the original article. Its use is increasing rapidly. The cities of New York and Boston have been, heretofore, the principal markets for this important adjunct to the iron trade.

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	R to of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	68	48	\$	\$	\$	\$	\$	Sept. 30, 1860	Maryland Sterling.	3,000,000	5			
Baltimore and Ohio.....	Md.	380		13,111,800	10,781,833	566,070	3,922,203	2,305,788		Mortgage.....	2,500,000	6	87 1/2	1885	
do do										"	700,000	6	90	1880	
do do										"	1,125,500	6	92	1875	
do do										"	1,000,000	6		1867	
do Washington Branch.....	Md.	30		1,650,000						1st Mortgage.....	791,000	7		1866	
Bellefontaine and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	2d ".....	160,000	7		1870	
do do															
Buffalo and State Line.....	N.Y. & Pa.	192 1/2	68	1,950,050	1,049,000	27,545	911,019	495,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	132 1/2	75	1,101,432	1,428,000		104,860	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	90		3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	3,700,000	6		1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7		1861	
do do										1st ".....	800,000	7		1864	
do do										2d ".....	80,000	7		1865	
do do										3d ".....	950,000	7		1865	
do do										4th " S. F.....	1,365,000	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7		1865 & 1870	
do do										2d ".....	600,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7			
do do										2d ".....	1,535,000	7			
do do										3d ".....	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report	received.					1st Mortgage.....	400,000				
do do										2d ".....	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,756	7,335,493	50,386	790,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	80	Feb & Aug 1	
do do										2d ".....	3,600,000	7	3 1/2	Feb & Aug 1	
do do										2d ".....	2,000,000	6	24	May 1.	
Chicago and Rock Island.....	Ills.	45 1/2	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7		1870	
Chicago, Burlington and Quincy.....	"	70	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	10 1/2	1873	
do do										" 2d " S. F.	813,000	7		1890	
do do										1st Mor. Chi. & A. & R.	399,000	7		1867	
do do										2d ".....	303,000	7		1869	
do do										1st "Cent. Mil. Tract	393,000	7		1864	
do do										2d ".....	245,000	8		1868	
Chicago, Iowa and Nebraska.....		82		No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	60		2,155,800	1,356,000		644,225	174,595	Mar. 31, 1861	1st Mortgage.....	441,000			1867	
do do										2d ".....	950,000			1860	
Cincinnati Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d ".....	532,000				
do do										3d ".....	104,000				
do do										Income.....	305,509				
Cleveland and Mahoning	Ohio.	68 1/2		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7			
do do										2d ".....	400,000	7			
do do										3d ".....	344,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	20 1/2	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	13 1/2	1860	
do do										2d " M. L. or 1st Ex.	1,180,000	7		1873	
do do										3d 2d Ex.....	1,165,000	7		1865	
do do										4th 3d Ex.....	1,154,000	7			
Cleveland and Toledo.....	Ohio.	46 1/2	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	339,000	7		1867	
do do										1st " 2d Div.	263,000	7		1872	
do do										2d ".....	265,000	7		1862	
do do										1st " Tol. Nor. & Clew	521,000	7		1863	
do do										2d ".....	293,300	7		1861	
do do										Junction Income..	41,500	7		1862	
do do										C. & T. Income..	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	116 1/2	135	4,746,100	519,000	4,201	1,255,003	664,833	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	125	98 1/2	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7		1861	
do do										2d ".....	303,000	7		1862	
Columbus and Xenia.....	Ohio.	87 1/2	54 1/2	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700	7		1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666	2,512,000					2d ".....	2,212,000	8			
do do										1st Mortgage.....	300,000	7			
Dayton and Western.....	Ohio.	33		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	2,500,000	7		1875	
Detroit and Milwaukee.....	Mich.	186		No report						2d ".....	1,000,000	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734	7			
Evansville and Crawfordsville.....	Ind.	132		956,061	1,219,100	249,668	134,140			2d ".....	18,000				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d ".....	18,000				
Galena and Chicago Union.....	Ills.	72	121	6,028,300	3,524,200	none	1,462,732	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000		104	1862 & 1863	
do do										2d ".....	1,320,000		98 1/2	May 1, 1875	
Great Western	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	64		400,000	No report					Land mortgage...	5,000,000		47		
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573		Mortgage Conv.	1,334,000		30		
Hannibal and St. Joseph.....	Mo.	206		1,041,066	10,554,000	220,376	996,907	512,933	Sept. 1, 1860.	1st Mortgage.....	927,000	6		1873	
do do										2d ".....	4,000,000	7	102	1869 & 1870	
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	2,000,000	7		1875	
Hudson River	N. Y.	42 1/2	144	3,758,466	9,107,000	182,106	2,047,145	773,121	Sept. 30, 1860	2d ".....	1,840,000	7	86 1/2	1875	
do do										3d ".....	88,000	7	87	1868	
Illinois Central.....	Ills.	65 1/2	455	15,654,960	13,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	12,885,000	7	9 1/2	1875	
do do										Construction.....	4,115,000	6		1875	
do do										Debtures.....	42,740				
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	60,000	7			
do do										2d ".....	578,000	10			
do do										Income.....	38,700	11			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,852	230,634		1st Mortgage.....	500,000	7		1866	
do do										2d ".....	400,000	7			
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort...	900,000	7			
do do										1st Mortgage.....	649,284	7			
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d ".....	314,000				
Iron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	132,797	Dec. 31, 1860.	1st	280,000	7		1861	
do										2d	392,000	7		1873	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st	260,000	7			
do										2d " Conv.	1,000,000	7			
do										3d	600,000	7			
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	903,000				
do										2d " E. D.	1,000,000		12		
do										1st Land Grant W D	4,000,000				
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.	29		514,433	130,000		105,914	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883	
Little Miami.....	Ohio.	65					1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,100	6			
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		245,910	98,679	June 30, 1861	1st Mortgage.....	218,000	7			
do										1st	2,100,000				
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.	288		2,500,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,030	Dec. 31, 1860.	1st Mortgage	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.	203		8,561,213	196,408	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868	
do										2d	2,000,000	7			
do										3d	1,500,000	7			
do										Sterling Income.....	333,000	4			
Michigan Central.....	Mich.	60½	284	6,057,784	7,968,429	125,000	2,126,699	910,169	May 31, 1861	Domestic	928,617	6		1872	
do										1st Mortgage Sterling	467,485	6	105		
do										1st " Conv.	500,000	8		1869	
do										1st " unconv.	250,000	8		1860	
do										1st " Dollar Conv.	2,500,000	8		1869	
Michigan South'n & North'n Indiana	Mich &	24½	246	9,018,300	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	1st " S. F. Conv.	4,153,000	8	93	1882	
do										Mort. Mich. S.....	991,000	8	90	1860	
do										" Nor. Ind.....	985,000	8	88½	1861	
do										" Goshen Line.	1,168,600	8	88½	1868	
do										S. F. Toledo	2,850,000	8	85	1885	
do										2d Mortgage	2,465,000	8	73	1877	
do										1st Mortgage.....	400,000	8			
do										2d	200,000	8			
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8			
do										2d	600,000	8			
Milwaukee and Prairie du Chien....	Wis.	39	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	95½	1891	
do	Wis.	71		No report											
Mississippi and Missouri.....	Iowa.	55		No report						1st Mortgage Conv.	1,000,000	7			
do										2d " S. F.	400,000	8			
do										Oskaloosa Div.....	1,425,000	7			
do										Land Grant.....	7,000,000	7			
New Jersey.....	N. J.	13	34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000	7			
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.						
New York and Erie Pref.....	N. Y.	67½		Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860	1st Mortgage.....	3,000,000	7	105½		
do	do common, ..	40								2d	4,000,000	7			
do										3d	6,000,000	7	97		
do										4th	4,900,000	7	99		
do										5th	1,792,500	7	76		
New York and Harlem Pref.....	Conn.	36½	138	5,717,190	6,055,752	.....	1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	110½	1873	
do common		15								2d	1,000,000	7	100	1864	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7		Dec. 1, 1866	
do											978,000	6		Oct. 1, 1875	
New York Central.....	N. Y.	89½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. I.	7,925,000	6	98	May 1, 1883	
do										Mortgage.....	3,000,000	6	105	June 15, 1864	
Northern Central.....	Md.	138		2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,086,500	6		1885	
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,450,000	6			
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6			
do										3d	316,905				
do										Construction.....	4,637,920				
do										Income.....	3,591,185				
Ohio and Mississippi, Western Div....	Ills.	148		.....	3,292,403		No report			State Loan.....	7,000,000		38		
Pacific.....	Mo.			3,199,662	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	" S. W.....	2,800,000	6			
do										Construction.....	4,500,000	6			
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,905,000	6		1888	
do										2d	2,319,000	6		1875	
do										2d " Sterling	1,957,440	6		1875	
do										State Works.....	7,200,000	5			
Peru and Indianapolis.....	Ind.	74		1,100,090	820,000	80,000	No report			1st Mortgage.....	2,300,000	6		1894	
Philadelphia, W. and Baltimore.....	Del.	98		5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863	
do										1st Mort. O. & P.	1,000,000	7		1865	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,737,973	2,335,353	761,555	June 30, 1861	2d	750,000	7		1866	
do										1st " O. & I.	1,000,000	7		1872	
do										2d	380,000	7		1873	
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,553	29,600	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000	7			
Racine and Mississippi.....	Wis.	104		2,703,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.						
do															
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	123,000	10		1856	
do										"	997,000	7		1866	
do										"	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.	123		848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886	
do	Ohio.	56		403,975	500,000	100,000	110,200	53,100							
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000				
do										2d	450,000				
Steuenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d	900,000	7		1865	
do										1st Mortgage Conv.	1,000,000	7	75	1862	
Terre Haute, Alton and St. Louis....	Ills.	208		No report						2d " Conv.	2,000,000	7		1868 & 1870	
do										1st " Bel. & Ill.	517,000	7		1873	
Terre Haute and Richmond.....	Ind.	100	73	1,381,450	230,000	none.	377,652	216,183	Dec. 1, 1861.	1st Mortgage.....	270,000	7	75½	1866	
do	Ohio & Ind	52½	243	2,123,500	3,996,049	52,389	233,546			1st Mortgage.....	3,400,000	7		Aug. 1, 1865	
do										2d	2,500,000	7	45	Nov. 1, 1878	
do										Mort. Coupons.....	25,000	7		1860 to 1865	

LONDON GAS WORKS.

[Continued from page 165.]

Those who are familiar with the mode of heating the blast for iron furnaces might be disposed to wonder at the comparatively low temperature imparted to the gas by the vast extent of highly heated surfaces of the retorts. In the heating ovens of blast furnaces a million cubic feet of air are often heated every hour to a temperature which will "cut lead," and it is occasionally the case that the air pipes beyond the ovens become heated by the passing blast to a dull red. But, in a range of 150 long retorts, making little more than 50,000 cubic feet of gas per hour, and yet exposing several thousand square of surfaces heated with, say one ton of coke every hour, the temperature of the escaping gas is such that it is often drawn from the main directly through the exhauster, without the least injury to the finished surfaces and delicate spring packing of that apparatus. In many of the condensers, too, even when placed between the main and the exhauster, the socket joints are made with tarred yarn and lead. The explanation of this moderation of temperature in the gas is to be found in the conversion from the solid to the aeriform state, a great amount of heat becomes latent. Were the retorts filled with air, it would soon become excessively heated, and a red heat on the mouth piece, lids, and even the ascension pipes, would be a matter of course. But as soon as a portion of the gas already formed in the retort becomes hot, its heat is in a great measure absorbed by the nascent gas at the same instant issuing from the pores of the coal, and thus the temperature is constantly kept down to a point much below what might be expected if the amount of external heat applied were alone considered.

From the condenser the gas is taken to the exhauster, except where, as already noted, the latter draws directly from the hydraulic main. Mr. Grafton, the original patentee of the clay retort, is said to have been the first to show that, by pumping the gas from the retorts, so as to relieve them from the accumulated resistance of all the water joints which the gas encounters on its way thence to the gasholder, the furring of the retorts with carbon was, in a great measure, prevented. This accumulated pressure often amounts to 33 in. of water, 28 in. being common, when we include the dip of the pipes through which the gas enters the hydraulic main. With exhausters a partial vacuum is often maintained in the main, so that if a small opening be made air will rush in instead of gas coming out. In the retorts, however, a very slight pressure, equal, say, to 1 in. or 2 in. of water, is maintained, the difference between this plenum and the partial vacuum in the hydraulic main being accounted for by the resistance offered to the gas by the dip of the pipes, say 3 in., into the tar in the main.

The first exhausters were reciprocating pumps, a sheet iron cylinder open at the bottom, and having a fine valve opening upwards at the top, being made to work up and down, with its lower edge in water around the rising end of a pipe, admitting the gas, and having also a valve, opening outwards, at its top, the whole apparatus being enclosed in a gas light case. Exhausters of this kind are still at work at the Pancras station of the Imperial Company's works. They were very much cheaper in first cost than Beale's exhausters now used; but the old plan finds few advocates now. The friction of the apparatus, although moving freely in water, was found to be con-

siderable, and it imparted objectionable fluctuations to the gas, causing the water gauge and the lights at the burners to oscillate violently.

Mr. Beale, of Greenwich, produced a rotary steam engine many years ago, which, by way of bantering a distinguished opponent of that class of motors, he named the "Anti John Scott Russell Steam Engine." A considerable number of these engines are still at work, and there are many besides the patentee who have much faith in their ultimate triumph over reciprocating engines. One of small power drives all the machinery in Mr. Beale's own workshop, at a very trifling cost for repairs, the expenditure of fuel being no more than for any ordinary engine of equal power. At the South Metropolitan Gasworks one of these engines is employed for driving the exhausters and another for hoisting coal from the canal boats coming up along side. But Mr. Beale has found altogether the best market for his engines among the gas companies, who purchase them for exhausters. Every gas company in London, with the exception of the Equitable and the Great Central Consumers', uses them, the motive power, in the majority of cases, being a little trunk engine of neat design and fine workmanship, made by Mr. Beale, and fitted up on the same base plate with the exhauster. At the South Metropolitan Gasworks, however, as already mentioned one of Mr. Beale's rotary engines is employed to drive the exhausters, and at the several works of the Charcoal and Phoenix Companies, and at the Commercial, Western, and perhaps some other works, they are driven by separate beam engines, generally by Scotch builders, the latter being a fact for which we cannot exactly account.

Mr. Beale's exhauster consists of a stationary cylindrical case, with a horizontal axis, within which revolves a shaft, placed eccentrically with respect to the axis of the case, and carrying two flat plates or pistons adjusted to fit accurately to the internal surface of the case. The principle is identical with that of the majority of rotary engines and pumps. The tarry particles which, even after the gas has passed the condenser, follow it to the scrubbers, keep the wearing surfaces of the exhauster well lubricated.

[To be Continued.]

CLEVELAND & TOLEDO RAILROAD COMPANY.

The following circular of this company addressed to the bondholders is given in connection with the advertisement of Messrs. Vermilye & Co., in another column.—*Amer. Railroad Jour.*

To the Bondholders of the Cleveland & Toledo R. R. Co.

The almost unexpected degree of favor with which our issue of sinking fund mortgage bonds has been received, induces us to call the attention of bondholders to the advantages afforded by the arrangement for converting the various issues of bonds into one class, under one comprehensive mortgage.

In 1855 an issue of three and a half millions, in one thousand dollar bonds, payable at the Corn Exchange Bank, New York, bearing interest at 7 per cent, payable semi-annually at the same place, was made under a new mortgage of the entire property of the company, a sinking fund of 1 per cent. being pledged for their redemption in 1855. None of these bonds have been sold, they being de-

signed exclusively for the conversion of the various classes into one class of mortgage bonds. Exchanges are continually going on, and so great is now the demand for a good 7 per cent first mortgage bond, with about twenty years to run, that these bonds are now selling in market for over 92 cents on the dollar, and few offering at that price, with a fair prospect of their reaching par. Already we have converted about \$1,400,000 of the whole issue, and the sinking fund commissioners have in their hands over \$175,000 of securities toward the ultimate liquidation of these bonds; and the prospect now is, that before any large proportion of our bonded debt matures we shall have issued those bonds in return for the principal part of our entire bonded debt. These bonds are superior to any class issued, except the T. N. and C. R. R. first and second mortgage, due in 1863, about \$800,000 in amount. Being better known, they are more saleable; the security is ahead of all others, with the above exception, in value; there is a registry provided for them, which protects the holder, in case they are stolen from him, even although, as has been the case sometimes, in one known instance at least, the number may be altered by a chemical process to prevent identification. To improve the amount of mortgage security, therefore—to procure a more saleable bond; to get a bond capable of registry, so as to pass only by endorsement of the owner, like a certificate of stock—our bondholders will do well to bring in the old bonds and get sinking fund mortgage bonds for them. The exchange may be effected at the banking house of Vermilye & Co., No. 44 Wall street, New York, or at the company's office in Cleveland, when the old bonds are presented in sums of \$1,000. The registry is at Cleveland. Bonds may be sent to Cleveland and returned by express: if by United States express at the expense of the company.

H. C. LUCE,

Treas. of C. & T. R. R. Co.

Cleveland, Ohio, May, 1862.

Bonded Debt of the Cleveland & Toledo Railroad Company.

	May, '58.	May, '62.
Junction R. income, due June 1, 1862,....	\$61,500	\$42,000
" Loyd's, " Oct. 1, 1862,....	5,000	5,000
" 2d m., " Nov. 1, 1862,....	324,000	252,000
T. N. & C. R. R. 1st m., due Aug. 1, '63,....	522,900	521,000
" 2d m., " Aug. 1, '63,....	299,000	293,300
C. & T. R. R. income, " Sept. 1, '63,....	250,259	112,000
" " " July 1, '64,....	877,000	500,000
" " div., " April 1, '65,....	220,185	153,710
" " " " April 1, '65,....	5,100	3,735
Junction 1 m., 1 div., " April 1, '67,....	377,000	314,000
C. & T. R. income, " Sept., 1870,....	370,000	39,000
Junction 1 m. 2d div., " Dec., 1872,....	308,000	251,000
Sinking fund mortgage, " 1855,....	264,000	1,334,000

The Milwaukee & Prairie du Chien Railroad earned in April:

Passengers, ...	\$16,766 12
Freight, ...	40,414 92
Mails, ...	1,733 87
Rents, ...	2,844 50

Total,.....\$61,759 41
Corresponding month, 1861,..... 49,102 19

Increase,.....\$12,657 29

'SIGN BOARDS AT WAY STATIONS.—it is a most intolerable nuisance to have to be continually asking the Conductor, "What station is this?" A very few dollars judiciously spent in sign boards would add greatly to the comfort of travelers.

MONETARY AND COMMERCIAL.

The money market continues to present the same features of dullness and ease noticed in our previous report. Business generally is quiet, and without much prospect of a very speedy revival. Hence business men, as a general rule, are in the market as lenders instead of borrowers.

The supply of exchange is more than equivalent to the demand, and the market is dull and heavy. Selling rates vary from $\frac{1}{8}$ to $\frac{1}{4}$ for banker's checks. Quotations are:

	Buying.	Selling
New York.....	par	$\frac{1}{8}$ @ $\frac{1}{4}$ prem.
Boston.....	par	$\frac{1}{8}$ @ $\frac{1}{4}$ prem.
Philadelphia.....	par	$\frac{1}{8}$ @ $\frac{1}{4}$ prem.
Baltimore.....	par	$\frac{1}{8}$ @ $\frac{1}{4}$ prem.
Gold.....	21 @ 24 prem.	31 @ 4 prem.

The new constitution of Illinois, amended last winter by the convention under the excitement then existing against their bank currency, and shortly to be submitted to the people for their approval, provides that

SEC. 3. No bank bill, check, draft, note or other written or printed instrument of a less denomination than ten dollars, for the payment of money or other valuable thing, intended to circulate as money or currency, issued or drawn on any bank, banking corporation, or any association or corporation with any banking powers, within or without this State, shall be uttered or passed within this State; and after the year of our Lord one thousand eight hundred and sixty-four no such bill, check, draft, note, written or printed instrument of a less denomination than twenty dollars shall be uttered or passed in this State—and after the year of our Lord one thousand eight hundred and sixty-six, no such bank bill, check, draft, note, written or printed instrument of any kind, character or denomination whatever, shall be uttered or passed in this State.

It is an old adage that "extremes meet," and this case appears to be no exception to it. McElroy's Bank Note Reporter, of Chicago, says of this singular provision that "should it be adopted by the people, it would make it illegal to use and pass United States Treasury Notes or receive them, or even for a Banker to draw his draft on New York or any Eastern city, or from one city to another within the State. The intention of driving out all paper money and of having nothing but a metallic currency, not excepting the United States Treasury Notes, it is equally impracticable as absurd. It is a fact, established by experience, that if the State of Illinois does not furnish her own currency other states will furnish it for her; and why should the people of Illinois, in this way, lend from ten to fifteen millions of dollars to foreign institutions? It is useless and wrong to adopt or make laws which we know the demands of trade and commerce make it impracticable to carry out."

The Homestead Bill, lately passed by Congress, throws open all the lands owned by the Government, in tracts of not over 160 acres to actual settlers.

Any citizen of the United States, or any person who has declared their intention to become such, who is 21 years old, or the head

of a family, or has served in the military or naval service of the country during this rebellion, can make the entry on the payment of ten dollars, and the fees of the Register and Receiver of the Land Office. This is all the settler is required to pay at any time.

The Act takes effect January 1st, 1863, and requires the settler to reside on and cultivate the land five years to perfect his title.

Any person can enter under this Act land on which he has a pre-emption claim.

The great financial item of the week has been the great fraud perpetrated on the State of Indiana by one of the financial agents of the State in New York, who has issued nearly a million and a quarter of fraudulent bonds and used them in Wall street, in connection with two other leading operators. The bonds were probably mostly used as collaterals and not intended to be sold, many of them having been already redeemed and canceled by the parties. Great praise is due to Gov. Morton for the manner in which he managed this affair since it came to his notice, and we trust that the efforts he is still making will result in saving the State from any very considerable loss.

The following is a statement of the earnings of the Great Western Railway for the week ending May 9, 1862, compared with the earnings of the corresponding week of last year:

Passengers, ...	\$15,578 37
Freight and live stock, ...	27,684 40
Mails and sundries, ...	1,639 78
Total, ...	\$44,902 55
Corresponding week of last year, ...	37,719 01

Increase, ...

\$ 7,183 54

The gross earning of the Chicago & North Western Road—

For the year ending March 31, '62, ...\$857,657 98
Operating expenses, \$434,891 43;
other expenses, \$55,178 73, ...

490,070 14
Net earnings, ...

\$367,587 82
Interest paid, ...

118,980 00
Net, ...

\$247,607 82
Amount necessary to pay the interest

on whole first mortgage, ...\$252,000 00
Thus this road earned in a bad year within

less than \$5,000 of enough to pay the interest on bonds which are selling at 42 up to 58 according as assented or unassented.

Annexed is the report of J. W. Alsop, Receiver of the Ohio & Mississippi Railroad,

showing its business for the month of March:

Balance from February account, ...\$17,690 12

RECEIPTS.

From Adams Express for February, \$1,769 74; passengers prior to

March 1, \$9,172 66; freight prior to March 1, \$8,387 48, ...

19,339 88
From passengers on March acc't,

\$21,857 28; freight on March acc't,

\$28,066 76, ...

49,924 29
From other sources, ...

533 76
Total, ...

\$87,488 05

DISBURSEMENTS.

Paid charges advanced to other roads, \$3,474 06; on acc't of bridge repairs, \$3,393 75; new cars built, \$1,391 84; interest and discount, \$490 77; sundry office expenses, \$533 33; former arrearages, \$12,881 50; February current expenses, \$43,240 85; March current expenses, \$9,925 45, ...

\$75,331 55
Balance carried to April acc't, ...\$12,156 50

The gain in traffic on the Cleveland & Columbus Road, in April, was \$21,000. The gain the first week in May is reported at \$7,000.

The receipts of the Harlem Railroad for the month of April are as follows:

1861, ...	\$94,630 08
1862, ...	94,957 56

Increase, ...

\$ 327 48

The Albany Express passenger trains were run in April, 1861, and not in 1862.

The Galena & Chicago Railroad earned the first week in May:

1862, ...	\$28,762
1861, ...	38,015

Decrease, ...

\$ 9,253

The following are the earnings of the Toledo & Wabash Railroad Company, for the first week in May:

	1862.	1861.
Passengers, ...	\$ 3,557 70	\$ 3,334 05
Freight, ...	21,445 63	14,322 90

Total, ...

\$25,005 33 \$17,656 95

Increase, ...

\$7,348 38

RAILROAD ROLLING STOCK.—The extraordinary profits which have been realized by the several railway wagon companies at present in existence, and the high position which this kind of stock invariably maintains in the market, has led to the formation of another similar undertaking—the Metropolitan Railway Carriage and Wagon Company, upon the Limited Liability Principle, and with a capital of £100,000, in shares of £10 each, for the letting of carriages and wagons to railway companies, mineral owners, merchants and others, such carriages and wagons being built or maintained by the company or by contract, as may appear most desirable. The Midland Wagon Company pay regular dividends of 10 per cent. per annum, and occasionally large bonuses in addition, yet at the present time they have a reserve fund of nearly \$60,000; and so high is the estimate which the public forms of its prosperity that the shares are worth in the market twice the amount which the shareholders have paid upon them. The Railway Rolling Stock Association pay 9 per cent. dividend, and have a reserve of over £20,000. The Birmingham Wagon Company pays 16 per cent., and have over £10,000 reserve. And the Gloucester Wagon Company, which builds and maintains its own stock, has paid in its first year's working 10 per cent., and carried £3,500 to a reserve fund. The value in the market of the stock of each of these companies is from 35 to 45 per cent. premium. In the list of directors we notice the names of several gentlemen largely connected with railway property, and who would, no doubt, have considerable influence in promoting the interests of the Company.—*London Mining Journal.*

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.

TRAINS RUN AS FOLLOWS

SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	6:40 P. M.
Mail and Express.....	10:30 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton

RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day., Toledo & Day. Huntsville.....	5:20 P. M.	10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Terre Haute and Lafayette and Chicago Mail.....	5:05 A. M.	11:10 A. M.
Indianapolis and Chicago Night Express.....	3:20 P. M.	11:50 P. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

ns run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
u yville and St. Louis Mail.....	5:00 A. M.	10:45 P. M.
ymour Accommodation.....	3:00 P. M.	8:45 A. M.
isville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.
One through train for Louisville and St. Louis Sunday evenings.		

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES slower than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omibuses call for passengers as usual.

P. W. STRADER.
General Ticket Agent L. M. & C. X., and C. H. & D. Railroads.

W. H. L. NOBLE.
General Ticket Agent Indianapolis & Cincinnati Railroad.
R. F. FULLER.
General Ticket Agent Ohio & Mississippi R. R.

McCALLUM, BRISTOL & CO.,

BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct **McCALLUM'S PATENT INFLEXIBLE ARCHED TRUSS BRIDGE**, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge and in the most approved and perfect manner. Parties desiring information, will please apply to the firm at their Office 99 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y.

Ag. 26.

MIDDLETON & STROBRIDGE,

LITHOGRAPHERS AND ENGRAVERS.

Walnut St., CINCINNATI.

Special attention given to all kinds of work in our line, such as Show Cards in one or more colors, Maps, Bonds, Portraits, Certificates of Stock, &c., &c.

J. T. CRAPSETT,
ATTORNEY AT LAW,
OFFICE:
N. W. Cor. Walnut & Sixth streets,
my21 CINCINNATI

ERIE RAILWAY.
Great Broad Gauge, Double Track
and Telegraph Route
TO
NEW YORK, BOSTON,
AND ALL EASTERN CITIES,
CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DONLAP, 15 State Street, Boston, Mass.; or of JACOB FORSTY, Freight Agent, 64 Clark Street, Chicago.

Feb 6. CHARLES MINOT, Gen'l Supt.

Baltimore and Ohio Railroad

RE-OPENED!



This great national thoroughfare is again open for

Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition, The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the recent *Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

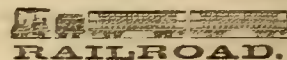
At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting WASHINGTON CITY en route*—being \$1.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure *through Tickets and through checks to WASHINGTON CITY.*

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wes. Ag't, Bellaire, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M.; Chicago at 6:00 A. M., connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.

W. H. L. NOBLE,

General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

KNOX & SHAIN,
Engineering and Telegraphic
INSTRUMENT MAKERS,
218 WALNUT ST., PHILADELPHIA.
(Two Premiums by Franklin Institute.)

OHIO & MISSISSIPPI

RAILROAD.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENNES, Cairo, and St. Louis.

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.

RETURNING.—Mail Train Leaves East St. Louis, (Sundays excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M. arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office No. 5 East Third street; No. 1 Burnet House corner of north-west corner of Front and Broadway; Spencer House Office; and at the Depot corner of Front and Mill Streets

G. B. McLELLAN, Gen'l Superintendent

Omibuses call for Passengers;

Novemb 11th, 1861.

1861. 1861
FAST TIME.
LITTLE MIAMI
 AND
COLUMBUS AND XENIA
 AND
CINCINNATI, HAMILTON & DAYTON
RAILROADS.

On and after SUNDAY, Nov. 10. 1861, Trains depart as follows:

7.30 A. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Eaton, Richmond, Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9.45 A. M.—Cincinnati Express—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburg, via Columbus, Steubenville and Pittsburg; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9.00 A. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty.

7.40 A. M.—Morrow Accommodation—From Little Miami Depot.

3.30 P. M.—Accom—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4.00 P. M.—Accommodation—From Little Miami Depot. For Columbus and Springfield.

5.30 P. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Richmond, Indianapolis, and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5.50 P. M.—Accommodation—From Little Miami Depot. For Xenia connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7.30 P. M.—Glendale Accommodation.

10.00 P. M.—Night Express—From Cincinnati, Hamilton and Dayton Depot—Connects via Columbus, Steubenville, and Pittsburg; via Columbus, Crestline and Pittsburg; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburg, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,

General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
 Mathematical Instrument Makers
 No. 67 West 6th St. bet Walnut & Vine
 CINCINNATI O

W. MORRILL. G. B. BOWERS
MORRILL & BOWERS,
 (Successors to and members of the late firm of
 C. WASON & CO.)
CLEVELAND, OHIO,
 Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction to all.

1862. 1862.
Pennsylvania Central R.R.
285 MILES DOUBLE TRACK.



(With its Connections)
 IS A FIRST CLASS ROUTE.
 FOR SAFETY, COMFORT AND SPEED,
 TO ALL THE EASTERN CITIES!
 THE TRACK IS STONE BALLASTED
 AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
 (with close connections from Western Cities.)
 ALL CONNECTING DIRECT TO NEW YORK.

THROUGH PHILADELPHIA,
 AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
 ONE TRAIN RUNS DAILY (430 MILES.)
 VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
 BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.
 ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburg with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburg.

CLARKE & CO., Transfer Agents, Pittsburg.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

W. W. AIKMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.

CLARKE & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

G. B. NEAL, Parkersburg, Virginia.

HALL & CO., Marietta, Ohio.

H. S. PIERCE & CO., Zanesville, Ohio.

MCDOWELL & McCORM, Portsmouth, Ohio.

R. McNEELY, Maysville, Ky.

J. P. JOHNSTON, Ripley, Ohio.

JOHN TODD, Covington, Ky.

G. L. HEATON, Cleveland, Ohio.

R. C. MELDRUM, General Traveling Agent for the South and West.

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. . . . } Editors

CINCINNATI:
THURSDAY, JUNE 5, 1862.

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PUBLISHED EVERY THURSDAY MORNING,

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Subscriptions and communications addressed to
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Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.

Cincinnati, Hamilton & Dayton—

Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	10.10 A. M.

Dayton, Lima, Toledo & Huntsville—

Cin. & Chicago Air Line Exp.....	5.20 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
		8.10 A. M.

Eastern Night Express.....

	10.00 P. M.	5.40 A. M.
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Sandusky, Dayton & Cincinnati—

Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.10 A. M.

Marietta & Cincinnati—

Mad. Accommodation.....	8.00 A. M.	5.20 P. M.
Ohio & Mississippi.....	3.30 P. M.	10.00 A. M.

Ohio & Mississippi—

Mail.....	5.05 A. M.	10.05 P. M.
Seymour Accommodation.....	3.00 P. M.	8.45 A. M.
Express.....	5.00 P. M.	6.53 A. M.

Indianapolis & Cincinnati—

Mad. Express.....	5.05 A. M.	11.10 A. M.
Chicago Express.....	3.20 P. M.	11.50 P. M.

Dayton & Michigan—

Tol. & Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.

Cincinnati & Chicago Air Line—

Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.

Cincinnati, Wilmington and Zanesville—

Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.

Kentucky Central— (City time.)

First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

GROWTH OF THE NORTHWEST.

Few persons, even those most familiar with the Northwest, have a full conception of its wonderfully rapid development in wealth and population. Thirty years ago the Ohio canal was completed between Cleveland and Portsmouth on the Ohio. The Miami canal was not opened through to the lakes until the summer of 1845, at which time the only railroads in Ohio were the northern end of the Sandusky, Dayton & Cincinnati—then called the Mad River & Lake Erie—and the Little Miami from Cincinnati to Xenia. These, with the exception of 33 miles of the "Erie & Kalamazoo"—now the Southern Michigan—and about the same distance on the "Detroit & Ypsilanti, (Michigan Central), and a small piece of the Detroit & Pontiac, (D. & M.), were all the railways the great West could then boast of, with the exception of a "one-horse affair," between Lexington and Frankfort, Ky., and a portion of the Madison & Indianapolis. Now the West has upward of ten thousand miles of railway, a large portion of which is yielding a fair income on a reasonable valuation of cost of construction.

The changes that have been made in all other departments of western affairs have been almost as great. In 1840 the population of the seven northwestern States of Ohio, Indiana, Illinois, Michigan, Missouri, Wisconsin and Iowa, was 3,351,542. In 1850, including Minnesota, the population had advanced to 5,403,595. But in 1860, with Kansas and Nebraska added, it reached the enormous extent of 9,073,055, being an increase in ten years of 3,669,460, or nearly 70 per cent., against a ratio of 35½ per cent. for the whole United States. A little more than 44½ per cent. of the whole increase of the country in the last ten years, belongs, therefore, to the Northwest. Should the increase for the current ten years be as great as the last, and in corresponding proportions, the Western States will have not less than 15,000,000 of people in 1870. This seems almost incredible; but from present appearances these results are likely to be attained.

The capacity of the West to support a large population is almost unlimited. The most thickly settled portion of the United States is Massachusetts, which has a population of about 158 persons to the square mile. In England the average population is reported at 332 to the square mile, while in some parts of the Netherlands it is as high as 650! The area included in the nine States named and the Territories of Nebraska and Dakota is not far from 850,000 square miles, or nearly 550 millions of acres—the great bulk of which is good arable farming land, on which almost everything for the support of man can be readily raised. When this territory becomes as densely populated as Massachusetts it will have a population of 134 millions; and should it ever reach the density of Belgium it will

exceed 550 millions, or more than one-half the present estimated population of the world.

As to the future of railways in the West there can be no reliable estimates formed, much of course will depend upon the growth of population, and much upon the European demand for the great agricultural products of this country. There can be, however, little doubt that railway interests must continue to steadily advance; for while there will be very little increase in the lengths of railroads, there must of necessity, and under the most adverse circumstances, be a vast increase in the agricultural products of the West, as well as in the import of merchandise and manufactures from the East. The passenger traffic must also largely increase, while it is reasonable to suppose that there will be maintained better paying rates for the transportation of merchandise, which have at times, on through business, been below the actual cost of handling. As it is even now, we find most, if not all our western roads earning more than their expenses, while many are paying fair dividends on rather extravagant cost of construction. Take for example the Cincinnati, Wilmington & Zanesville, one of the most unfortunately situated of any of our lines—traversing, it is true, a fine country, but having no ends, and consequently dependent for all through business, entirely upon other roads. This road's receipts for the year ending May 1st, 1862, were \$194,141. Expenses, \$125,045, leaving for net earnings \$69,096. This was mainly from local business. Had the road had independent termini at or above Wheeling, and at Cincinnati, it would have shown a decidedly more favorable result. When peace is restored, and the business of the country resumes its wonted activity, the traffic over all our western roads must greatly increase, and it will not be very long before almost every one of them will pay good dividends on a fair valuation—provided the managers have shrewdness enough to capitalise their debts, and thus get rid of the moth of interest that is now, and has from the beginning, been eating out, not only their earnings, but their very substance.

ELECTION OF DIRECTORS OF THE OHIO AND MISSISSIPPI RAILROAD.—On Tuesday afternoon the stockholders of the Ohio and Mississippi Railroad held their annual meeting and elected the following Directors: Joseph W. Alsop, N. Y.; Larz Anderson, Cincinnati; Wm. H. Aspenwall, N. Y.; Edwin Bartlett, N. Y.; Wm. H. Clement, Cincinnati; Henry Chancey, N. Y.; Chas. D. Coffin, Cincinnati; Chas. S. Cone, Cincinnati; Samuel W. Comstock, N. Y.; Edward Delano, N. Y.; Theodore Grayley, Lawrenceburg; Edward Leonard, N. Y.; Wm. J. McAlpin, Cincinnati; Thos. J. Mitchell, do.; S. M. T. Odell, N. Y.; S. W. Pomeroy, Cincinnati; W. W. Scarborough, Cincinnati; Fred Schuchardt, N. Y.; Joseph Torrence, Cincinnati, and Wm. Whitewright, jr., N. Y. Mr. Odell was elected at the request of the English bondholders.

THE COLORADO DESERT.

A very important bill is now before Congress in regard to this hitherto desolate region.

The United States are asked to grant to the State of California all the lands within the following limits: "beginning at the initial point of the San Bernardino base line as established by the general survey; thence running east on the said line to the Colorado river; thence down said river to its junction with the southern State line; thence west, along said line, to the eastern base of the main range of mountains; thence northerly, along the base of the said range of mountains, to the place of beginning."

The motives of the State of California in asking for this grant are thus stated in the joint resolution: "It is respectfully represented that the State of California, in thus applying to the federal government to become the custodian of the above-described tract of land, is actuated by no other motive than that of the common good and general welfare, being fully impressed with the conviction that the disposition which it is in contemplation to make of these lands will inure to the benefit of both State and federal government. The entire section of country herein described is known to be a *desert waste*, devoid of water and vegetation, owing to which it presents a great barrier to travel and transportation on the most approved route of land communication between the Atlantic and Pacific." "It is proposed by the State that in the event of the approval and concurrent action of Congress, to cause to be constructed a proper system of hydraulics—a series of canals traversing through all the practicable portion of this sterile waste—and thus not only remove the existing impediments to travel and transportation, but cause the desert to yield to the wants of man her latent, reserved, and hidden stores."

This description of the lands sought to be ceded by this government embraces an area of about six millions of acres, has a water front on the Colorado river of about one hundred miles, and stretches along the line dividing the State of California from the possessions of Mexico a distance almost as great. If we start from the point where the San Geronio Pass is intersected by the meridian line of San Bernardino, and trace the western base of the San Bernardino mountains in a southwest direction to the Colorado river, the line thus drawn will cut the territory now sought to be granted into two not very unequal parts, as will appear from the "map of public surveys in California to accompany the report of the surveyor general, 1860."

The part lying north of this line is a mountain region, of which but little is known. It is certainly not possible to reduce the greater,

if any, part of it to cultivation, or to irrigate it with water drawn from the Colorado river, for that river is on a much lower level. This portion of the territory is not in the line of travel between the Atlantic and Pacific, and its cession is not at all necessary to enable the State of California to carry into full effect the scheme of reclamation and improvement which she seems to contemplate. Besides, our knowledge of this region is not sufficient to enable us to determine its present or prospective value to the government and people of the United States. These mountains may be, and probably are, rich in minerals, and at some future day prove sources of great wealth. The committee is of opinion that, for these and other reasons which might be assigned, it would be unwise to cede this portion of the described district; and to that extent it reports unfavorably to the request of California.

The region of country lying south and west of the described line is of very different character. It is a vast, naked, desolate plain. With the exception of a narrow strip of bottom land on the west bank of the Colorado river, and small patches of grass around the few water holes and springs in the vicinity of the San Geronio Pass, it is a waste, uninhabitable country, without vegetation, except occasional bunches of the creosote plant, and near the California mountains, of the artimesia, and incapable of vegetation. From April to October it is subject to intense heat, the atmosphere is dry and scorching like the hot air from a furnace, and from November to March to severe cold. At the latter season the winds from the Coast range of mountains sweep across this vast plain to the Gulf of California with great violence, raising the fine sand of the desert in immense clouds, filling the atmosphere, concealing landmarks, almost obscuring the light of the sun, and forcing the traveler to stop immediately, and wait, as best he can, until the gale ceases. The Indians dwelling at the outlet of the San Geronio Pass regard this desert with horror. They call it the "journey of death," and believe that the souls of bad Indians are condemned to wander over this desert forever—in summer without water, in winter without clothing.

The desert character of this country proceeds not from the natural barrenness of the soil, but simply from aridity. In many parts of it the soil is of the very best quality, being composed of alluvial earths, marl, and shells; and whenever it has been tested, under favorable circumstances, it has proved fertile and productive. It needs only water. After an adequate supply of moisture, the "careless" weed has been known to grow ten or twelve feet high in a few weeks. All the evidence before the committee goes to show that if this country can be sufficiently irrigated it will become productive; and when its surface is clothed with verdure its now drifting sands will become fixed, and we may venture the opinion that its excessive heats will be mode-

rated, and its climate become pleasant and healthy to man.

In its present condition this country is of no use either to this government or to the State of California. On the contrary, it is a positive injury to both. Over this plain lies the shortest and most direct route from the Pacific coast to Fort Yuma, the districts of the Gila and Arizona, and the Atlantic States, and is, indeed, the only route which can be formed through our own territory between these points. It is the best line for a railroad to the Pacific from the southern Atlantic States. Over this route should pass the trade and commerce between these important sections, the supplies and munitions of the government, and the current of migration to the Pacific coast; all which is frustrated by the want of water. The mail has to diverge into Mexican territory; the rich mineral productions of Arizona, instead of going out through some California port, are driven to the foreign and more distant port of Guaymas; travel is forced into circuitous routes, emigration suspended, and this immense region is left unpeopled to the great detriment of the State of California in wealth and power. And such must forever remain its condition unless an adequate supply of water can in some way be found; with that all would be changed.

It is well ascertained that water can not be obtained on the plain itself. It seldom rains, and when it does, it is only in light showers; and it is impossible to gather and preserve in cisterns an adequate supply, even for the wants of travelers, and still more so to secure enough even for the most imperfect irrigation. All attempts to procure it by wells have signally failed. In some cases wells have been sunk to the depth of 120 feet, and no sign of water found. In one case, where a small quantity was found, it was lost entirely by deepening the shafts in the hope of a greater quantity. The citizens of San Bernardino county have spent above \$4,000 in vain endeavors to procure water by sinking wells. This government has sent out frequent expeditions from Fort Yuma in search of water, but after hard labor and great suffering they have always returned without success. Even the streams that come down from the mountains are speedily evaporated in the hot atmosphere, or soon lost in the arid plain.

The State of California is of opinion that a supply of water may be obtained by turning the waters of the Colorado river, in sufficient quantities, in upon this desert, and that in this way the whole region may be reclaimed. The committee is of opinion that this is practicable, and promises success; at all events, it is so hopeful as to justify the experiment. The Colorado river is on a much higher level than this plain. The Commissioner of Public Lands, in his letter to Hon. J. W. Crisfield, says: "It is a well-ascertained fact that the Colorado river is considerably higher than this desert. There is a natural channel,

known as New river, with a regular descent of five feet to the mile, but which is dry, except at high water in the Colorado, when there is a regular flow into the desert." Mr. Ebenezer Hadley, surveyor of Los Angeles county, in his report to O. M. Wozencraft, says: "After having made a careful reconnoissance of the country, I was forcibly impressed with the practicability of taking water from the Colorado river over a great portion of it, inasmuch as there is the unmistakable evidence of water having flowed from the river through innumerable channels, and finally concentrating into two of some magnitude, by which the water is conveyed far up into the basin. Water having passed through one of these channels from the Colorado river, soon after our acquisition of the country, it was called New river; the other may justly be called Old river." Lieutenant Williamson, topographical engineer, in his report, in speaking of this plain, says: "Not an inconsiderable portion of this divide is below the level of the Colorado river. In 1849 this river broke through its banks, and the water flowed inland for some two hundred miles, forming what is known as New river. In many places it formed lagoons, while in others it confined itself to a narrow channel. The water in the connecting channels having dried up, the lagoons still remain, and are of great benefit to the emigrants." Dr. Blake, geologist, reports: "On the part of the desert that is usually traversed by the emigration to California, via the valley of the Gila, the main dependence for water is upon 'New river' and its sloughs. The two ponds called the 'Great and Little lagoon' may be regarded as portions of this New river, from which they become filled only when the waters in the Colorado river rise to a great height."

The committee to whom this proposition was referred, says: With these proofs before it, the committee can not doubt the practicability of introducing the waters of the Colorado to any desirable extent.

If this measure meets with as favorable action from Congress as it has from the committee, it can not be doubted that a wonderful improvement will soon be made in this region, and that the desert will actually bloom as the rose. We trust that this grant will be made. It is of infinitely more importance to the development of mineral wealth in our Southwestern possessions than at first glance appears. The conversion of 3,000,000 acres of land from a dry and sterile desert to a garden of fertility right in the midst of the richest mineral lands, in this or any other country, must necessarily exercise a wonderful influence in hastening the development of the mineral resources around it. It is useless to Congress now and will forever remain so, unless granted to parties who will improve it. We therefore sincerely hope the measure will pass.

LIGHT AND HEAVY TRAINS.

We have on several occasions advocated the use of lighter machinery and rollingstock on roads where the travel is comparatively light, and are glad to see that the attention of railroad men is being attracted to the subject. The following interesting article on this subject, copied from the *Chicago Times*, was written by a gentlemen connected with the Pittsburg, Fort Wayne and Chicago Railroad, and gives practical results. He says: "I commenced railroad life about twenty-four years ago, on a road extending some forty-seven miles into the country from one of our Atlantic cities. At this time all tracks were laid with light rail, and engines and cars were also light as compared with those now in use—the engines weighing from $5\frac{1}{2}$ to $7\frac{1}{2}$ tons, and the cars, passenger and freight, say $2\frac{1}{2}$ tons. The passenger coaches would accommodate comfortably thirty persons, and the freight cars would carry about one-half the tonnage of a modern eight-wheeled car. The road referred to continued to increase its business, as did other roads built at that time, and, as the traffic became greater, the carrying capacity and weight of engines and cars also increased, until finally the heavy machinery now in use was substituted. A first-class passenger engine of the present time will weigh from twenty five to thirty tons, with tender in proportion. The passenger coaches will now carry say sixty persons, and their average weight is twelve tons, being an increase over the light cars of 140 per cent. in the ratio of capacity for passengers. The freight cars now in general use weigh about sixty-five per cent. more, on the same carrying capacity, than the light cars of twenty-five years ago."

To demonstrate the facts and figures set forth in the foregoing, let us see what the cost of transporting this excess of weight, over the 31,000 miles of railroads in the United States, amounts to annually. To do this it is assumed that every mile of road has at this time an average of seven trains passing over it each day (which is below the real fact,) and that each passenger train engines carries with it one baggage and two passenger cars, and the freight engines fifteen cars in each train. Taking this basis, we find an excess of weight per train, in the same amount of freight carried, of more than forty-five tons, which, at a cost of one half cent per ton per mile for transportation, amounts to an aggregate of over fifteen millions of dollars yearly.

In connection with these figures, and to show practically what is now being done, we may state that the Pittsburgh, Fort Wayne and Chicago Railway have three "locomotive cars" now successfully running in the passenger traffic,—these combine the locomotive and passenger-coach. One of them, during five months ending with September 30th, ran 12,008 miles, at a total cost, for repairs, fuel,

stores, and train service, of \$1,328 45—an average of only 11.06 cts. per mile run. Another of them is employed as a paymaster's carriage, and the third has recently been placed in the passenger traffic.

It has been observed by railroad men that the ordinary repairs of track and superstructure is about the same per mile run by train as the repairs of the train, including engine and cars, are per mile run. If such is the case, we would suggest that officers of western roads may find it conducive to the interests of their stockholders to give this whole subject a thorough investigation, as in doing so they may find that a change of present policy will tend to help the stock of main lines and branches located through thinly-settled portions of the country, or add something to the net earnings of roads whose gross receipts can not be increased sufficiently to sustain the present machinery used and meet the maturing interest on bonds.

RAILROAD MISCELLANY.

—The Galena and Chicago Railroad earned the third week of May:

Third week, 1862.....	\$33,080
Third week, 1861.....	34,121
Decrease.....	\$1,041

—The Michigan Central earned the same week:

Third week, 1862.....	\$36,816 10
Third week, 1861.....	30,091 12
Increase.....	\$6,724 98

—The Michigan Southern Road shows, on the third week in May, a gain of \$8,000. The Subscription to the Sinking Fund bonds now amounts to half a million.

—The Toledo and Wabash road earned in the third week of May:

	1861.	1862
Passengers.....	\$3,183 80	\$3,413 15
Freight.....	11,355 73	18,612 99
Total.....	\$13,539 53	\$22,025 14
Increase.....		\$8,485 61

The increase in three weeks is \$21,298 31.

The above figures show that the Western roads are doing a large business.

—The following is a statement of the amount coal transported on the Delaware and Hudson Canal

	Week ending May 24.	Season to same date.
Del. and Hudson Canal Co.....	26,963	79,960
Penn. Coal Co.....	28,663	71,583
Total tons.....	55,626	150,243
To same date last year:		
Del. and Hudson Canal Co.....	25,882	91,455
Penn. Coal Co.....	22,689	61,463
Total tons.....	48,571	152,917

—The Terre Haute and Alton Railroad Company pays the deferred coupon on its first mortgage bonds on Thursday next. There has been considerable delay in the payment of this coupon in consequence of the difficulty attending the settlement of the United States Government accounts with the Western Railroad Companies, and the distribution among them of the proceeds of their earnings for

the transportation of troops and supplies. This will leave the Terre Haute and Alton Railroad first mortgage assented bonds in the form of scrip, bearing about \$6,000 of new bonds for \$5,000 of the old assented bond scrip—equal, at the present quotation of 107@110, to 82@85 for the new first mortgage bonds. The order is as follows:

The following order was entered in the Circuit Court of the United States for the District of Indiana. On the 11th of February, 1862, to wit: "It is ordered that the Receivers be and they are hereby authorized, in their discretion, and as soon after the entry of this order as practicable, to pay out of the earnings of the said Terre Haute, Alton and St. Louis Railroad, which may come into their hands, the coupons of the first mortgage of the Terre Haute and Alton Railroad Company, falling due Aug. 1, 1861, and the coupons of the first mortgage of the Bellville and Illinois River Railroad Company, falling due Sept. 1, 1861."

In pursuance of the foregoing order, the undersigned hereby give notice that the coupons referred to in said order will be paid on the surrender of the same, at the Bank of North America, in the City of New York, on and after the 28th day of May, 1862.

New York, May 16, 1862.

A. C. FLAGG,
JOHN WILKINSON, } Receivers.

—At the annual meeting of the Directors of the Elmira and Williamsport Railroad, recently held in Philadelphia, the business of the Company for the fiscal year was stated to have been as follows:

Receipts from passengers, including troops.....	\$100,615 54
Receipts from freight on merchandise.....	102,411 08
Receipts from freight on coal.....	66,527 43
Receipts from United States mail.....	11,550 00
Receipts from miscellaneous sources.....	26,491 07
	\$307,496 02
The ordinary expenditures for operating the road have been.....	160,146 99
Leaving a profit of.....	\$147,349 03
Which has been appropriated as follows:	
40,000 cross ties on the track.....	10,000 00
Rebuilding bridges.....	7,200 00
Deposits for Mortgage Bondholders.....	70,000 00
Chattel.....	20,168 00
Interest on mortgage on Elmira Basin.....	3,500 00
" " Scrip, labor and material debt &c.....	5,895 47
Reduction of scrip, labor and material debt, &c.....	30,585 56
	\$147,340 03

—The books of subscription to the capital and stock of the Cincinnati & Indiana Railroad (Cincinnati to Lawrenceburg) were opened at the banking office of A. L. Mowry & Co. on Monday last, and the entire amount, \$500,000, was subscribed. This road extends the Cincinnati and Indianapolis Road directly into Cincinnati, and will give it large advantages for a through business.

RAILROAD EXTENSION.—The work on the extension of the C. & N. W. R. R. beyond Appleton has already been commenced, at least so the Appleton papers inform us. This is a most important move for the Company as well as the people of the Upper Peninsula of Michigan, since that country is naturally allied to Northern Wisconsin and has its only channel for trade and egress of its population *via* Appleton during a larger portion of the year. This extension in connection with the opening of proper wagon roads in the Upper Peninsula must prove a valuable adjunct in the development of that rapidly-growing country. We say *wagon roads*, for we believe the proper and economical working of the railroads in the Lake Superior country, during the season when they would prove most useful to that region, to be a chimerical undertaking.

A RAILROAD "SINK."—The Lafayette, Indiana *Journal* says a portion of the track of the Pittsburg, Fort Wayne and Chicago Railroad has sunk out of sight three times. The space where this occurred is about two hundred feet long. After losing two other tracks, the Company inserted piles. These have also sunk out of sight. They are now driving down piles of over sixty feet in length, and yet have not found hard ground. This spot is supposed to have been once occupied by a lake, over which vegetation has spread a thin crust.

ERIE, AND ATLANTIC AND GREAT WESTERN RAILROADS.

The Erie Railway is fast assuming, if it does not already occupy, the front rank among the American railroads. Everything is in keeping with its character as the great Continental line. It is not only based upon the harbor of New York, but it strikes this at three different points—Jersey City, Piermont and Newburg—like a great river that requires several outlets for its accumulated waters.—The vast volume of freight delivered at tide-water is received and distributed at the lowest possible cost, by means and facilities so ample that there are never any accumulations to obstruct the regular business of the road. The main depot at its Eastern terminus is at Jersey City, opposite New York, the best point, probably, in the whole harbor for such a station, as it is accessible at all times by the largest-class merchant vessels, which may always receive their cargoes, unaffected either by wind or ice. The value of the improvements at Jersey City is fully proved by the enormous increase of the business of the road since these have come into use. When completed, which will soon be the case, nothing will be wanting, on the eastern portion of the line to render the road by far the best situated, and the most perfect in its arrangements for business, of any on the continent.

The road, after leaving the Hudson and threading its way by an excellent route through mountain ranges for some two hundred miles, enters upon the elevated table land of Western New York, where it throws out branches touching every considerable town in this portion of the State, and every important port on the Lakes. If, at its eastern terminus, the road resembles a great river in the delta formed by its various outlets, the resemblance is equally kept up upon the western portion of its line, by the numerous tributaries which collect the flood that rolls along its channel. But nearly all of these tributaries come from the north, from debatable ground occupied in part by the Central railroad. In fact the only drawback to the Erie has been the want of an extension, westerly, *independent* of that of the Central which controlled, west of Lake Erie, the routes apparently common to both roads. This monopoly of the Central has always worked greatly to the injury of the Erie, which was almost wholly cut off from the Canada lines, and always occupied a subordinate position on the line following the lake shore to Cleveland. To avoid such drawbacks upon its prosperity, it was proposed to continue the legitimate extension of the Erie, along the great plain or table reached in Western New York, through North-western Pennsylvania, Central Ohio, and on to Cincinnati, where an important line, the Ohio and Mississippi, would carry the wide gauge of the Erie to St.

Louis. By keeping on the plateau nothing would be lost by falling into the basin of the Lakes, to rise again some thousand feet to the summit to be crossed, before descending toward tide-water. The great plateau presented other inducements for a railroad. It is one of the best settled and fertile portions of the country, capable of supplying a very large business—a territory up to the present time almost wholly without railways. As soon as the eastern boundary of Ohio was reached, the line would begin to strike the railways which compose the system of that State, and which would at once open the most direct and convenient communication with every important section and town in the West, and Southwest—with Cleveland, Columbus, Cincinnati, Indianapolis, Louisville, St. Louis and Chicago.

This great prolongation and complement of the Erie Railroad—its Western division—is now known under the title of the ATLANTIC AND GREAT WESTERN. It starts from the Erie road, at Great Valley, a station now called Salamanca, from one of the contractors of the Great Western, and to whose aid and energy the new enterprise has been greatly indebted for success. It then extends about 48 miles in New York, to the boundary line of Pennsylvania. The length of line in the last named State is about 88 miles. The most important point touched in it is Meadville, a thriving town of some 6 or 7,000 inhabitants. Soon after crossing the boundary of Ohio the line strikes the Cleveland and Mahoning Railroad at Warren and with this road forms a very direct connection with Cleveland. When Warren is reached, the Cleveland and Mahoning Company agree to adapt their road to the gauge of the Erie. At Ravenna, on the Cleveland and Pittsburg Railroad, another line will also be formed connecting with Cleveland. The importance of this connection can hardly be over-estimated. It is a city of some 50,000 people, having a very large and rapidly growing commerce, and is the terminus of an important system of roads extending westward. It will prove of the utmost value to the Erie and to the Atlantic and Great Western to reach this system by duplicated lines, independent of the Central and Lake Shore route. The latter, the past winter, was unable to transport the freight offering at Cleveland, to the great detriment of the lines entering that city from the West, as well as to the general trade of the country. All this obstruction will be completely removed by the opening of the Atlantic and Great Western to the points named.

The next important point to be reached will be Akron on the Cleveland, Zanesville and Cincinnati Railroad. Through this road communications will be opened with Central and Southern Ohio, and with every portion of the Western States. When Akron is reached, the Erie, and Atlantic and Great Western have fully tapped the Western System, at points which will give them a great advantage over every other competing route. They will collect the produce of the West from the very district where it is grown, and will command the trade of the connecting lines by the facilities offered for cheap and expeditious communication with New York. When the whole line, with a uniform gauge from New York to St. Louis is completed, it will stand as the most imposing monument of railway enterprise that the world has yet seen, and must serve as the great thoroughfare between the extremes of our widely extended country.

That portion of the line from the Erie Railway to the line of the Sunbury and Erie Railroad of Pennsylvania, is now in successful operation. From the line of the Sunbury and Erie

Railroad, westward, the work of construction is being most vigorously prosecuted, the contractors having some 5,000 hands at work. All the rails for the line to Akron a distance of 200 miles from Salamanca have been purchased, together with an adequate equipment. A contract for 30 locomotives has just been concluded in this city. The object of the company is to reach Akron, if possible by the first of January next. Means have been provided for the rapid prosecution of the work, and no efforts will be spared for its construction to the point indicated, by the date named.—*Hallett's Financial Cir.*

RAILROADS IN HINDOSTAN.

The report of the East India Railway Company shows that of their line, running from Calcutta up the valleys of the Ganges and Jumna to Delhi, the first 303 miles are in successful operation, together with a branch coal road to Rameeunge. There are also 275 miles in operation between Allahabad and Agra, passing by Cawnpore, making in all 578 miles. The line follows the South bank of the Ganges, as it receives fewer large tributaries from that side than the opposite. Some of them, however, are of great magnitude, as the Soane, which is crossed by a bridge having 28 of 150 feet each, the whole being 4,600 feet. Some other sections of the road are about ready for opening.

It is also contemplated to run a branch railroad from near Allahabad to Jubbulpore on the South, where a junction would be formed with the great Indian Peninsular Railway resting on Bombay. The branch line, however, is not begun and if undertaken at all will be kept entirely separate from the main line, so far as the accounts are concerned. The cost of the main stem will be about £19,700,000; and it is stated as a curious circumstance that on the last occasion of raising money, the managers received over £2,000 of premium on the stock issued. As to its business prospects, we observe that on 320 miles the earnings have been £14,407 per work which is equal to \$11,000 per mile per annum—a pretty good beginning. Much the larger share of the passenger receipts comes from natives, who mingle quite freely together in the second and third class carriages, apparently forgetful of the claims of *caste*. The fact is the iron horse is entering on a struggle with Juggernaut & Co., and will doubtless prove the more powerful of the two.

The lines embrace in which may be termed the government system, in addition to those mentioned above, are running one up the valley of the Indus, termed the Punjab Railway. From this a second, or rather an extension of the first, will diverge, passing through the province of Scinde to Delhi, its starting point being Umritsar. A section of the former has recently been opened; the latter is about commencing its operations. Its capital stock will be £2,500,000, and its length 280 miles.—Of the Great Indian Peninsular line 438 miles are in operation; but not in one continuous section, the mountain range known as the Bhore Gaults having to be crossed by bullock teams. The expense of conveying passengers and freight over these hills has eaten heavily into the company's profits. The total length of that road under construction is 675 miles, making the aggregate from Bombay to Jubbulpore, 1,113 miles. The total expenditure so far is given at £7,152,825; gross revenue for six months, £112,116. The passenger

rates for second and third class is almost half a cent a mile.

The Great Southern Railway has been opened from Madras to Trichinopoly, penetrating, like most of the others, a cotton growing country. We have not, however, noticed any recent statement of its length, cost or earnings.

It is announced that on the completion of the great line connecting Bombay and Calcutta, the mails will be transferred to it, saving two days now required to reach the latter, by sailing round the peninsula. The distance saved will be 1,000 miles. We see it stated that several coast lines of steamers are likely to go into operation before long, and an active rivalry between Suez and Bombay is expected. One great drawback on the development of trade by that route is the high tariff of rates on the Egyptian Railway, between Alexandria and Suez; but the canal of M. Lesseps is likely to bring about a reform in this respect.

In India the railroads, though not built by the Government, have a guarantee of five per cent. on their stock. This circumstance has imparted the high value to those securities which they possess. At the same time, it is calculated to prevent the effects of ruinous competition between rival interests, such as in other countries have prevented many of them for years from being productive. The costs of the works varies from £10,000 to £20,000 per mile. Among the directors and contractors we find frequently the names of natives; though usually in small proportion to those of Englishmen resident in or out of the peninsula.

NEW YORK AND HARLEM RAILROAD.

The receipts of the New York and Harlem Railroad Company, for the first four months of 1862, as compared with those of last year, are as follows, viz:

	1861.	1862.
January.....	\$103,494 63	\$100,932 75
February.....	88,201 46	96,936 38
March.....	88,700 72	103,020 32
April.....	94,630 05	94,957 56
Total.....	\$375,026 89	\$395,837 01
Increase over last year.....		\$20,810 12

The Harlem Company ran two express trains to Albany, also two express trains from Albany during the above period last year, which they have omitted this year, thereby saving in running expenses about \$15,000 a month, and notwithstanding leaving off these express trains the company show the above increase in their receipts. The company is about extending its track up Madison avenue to Central Park, at Seventy-ninth street, under the recent act of the Legislature, and expect to be enabled to run their city cars to the Central Park during this Summer or early Fall. It is not only a great public necessity, but is of great pecuniary importance to the New York and Harlem Railroad Company, and will be completed as expeditiously as possible. The route is up Fourth avenue to Forty-second street, along Forty-second street to Madison avenue, and up Madison avenue to the Central Park and Seventy-ninth street.

The stockholders of this company held their annual meeting on the 20th, when the following gentlemen were elected Directors for the ensuing year: Allen Campbell, Cornelius Vanderbilt, Daniel Drew, John Harper, Horace Brooks, Francis W. Emonds, Charles W.

Sanford, Horace F. Clark, John Alstyne, William C. Wetmore, Albert Smith, Albert J. Akins, A. B. Baylis.

At a subsequent meeting of the Directors, the following officers were chosen for the ensuing year: Allen Campbell, President; W. C. Wetmore, Vice-President; W. H. Emerson, Treasurer and Secretary. John Burchill was appointed Superintendent.—*Am. E. R. Jour.*

LONDON GAS WORKS.

[Continued from page 176.]

The exhausters are generally placed by themselves in an apartment making considerable pretensions to elegance. In one respect, therefore, those who delight in strong contrasts might derive much pleasure from a visit to some of the great gasworks of London,—let us say the Pancras and Hackney road stations of the Imperial Company, or the Commercial Gasworks at Stepney. From the smutty interior of the retort house, and from the ammoniacal stench of the outdoor premises generally, to say nothing of the overpowering fumes from the sulphate of ammonia apparatus in works provided with that profitable adjunct, the visitor may retreat into an apartment fit for a nobleman's dining room, well ventilated and bearing evidence, on all sides, of an amount of taste and scrupulous neatness which, the commercial man would conclude, were strangely misapplied in a gasworks. We will not mention the works, but there are a number, and among them some of the most profitable gas making concerns in the metropolis, where, instead of being the glory of the establishment, the exhausting room is its disgrace. But let us pass on, merely noticing that the exhausters are generally worked with a partial vacuum, corresponding to 1 in. or 2 in. of water below the atmosphere on one side, and against a pressure of from 24 in. to 30 in. on the other.

At most of the gasworks of the metropolis scrubbers are employed, a few, as the London, the Phoenix, and the City, having washers, the London, at Vauxhall, having no scrubbers while the two others named have both scrubbers and washers. In the scrubber the last particle of tar is supposed to be taken up, and the means for arresting this impurity consist of a thick layer or a series of layers of coke contained in a close vessel, and exposing a great aggregate surface to the gas. At the Phoenix works broken crockery-ware is preferred to coke, as, after having become coated with tar, the former may be thoroughly cleansed by turning, when required, on a blast of steam for a few minutes, which melts and separates the tar, leaving the broken dinner plates and old bottle glass to be used *ad infinitum*. In many works, the coke is constantly sprinkled with water, admitted through two or more tubular radial arms, revolving, by the reaction of the water, in the manner of the arms of a Barker's mill, the water being discharged through a number of small holes, as in the spargers used by the brewers for washing the extract out of the mashed grains of malt. At the Horseferry road station of the Chartered Gas Company, the gas is subjected to three separate scrubbing, at different stages in the whole process. Here, however, the scrubbers are lined with lead, and the liquid employed in them is diluted sulphuric acid, first admitted at a specific gravity of 1.030, and worked over and over the coke until the density has risen to 1.210, when a fresh solution of acid is substituted. For one of the large scrubbers somewhere about

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.		48	\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.	65	380	13,111,800	10,781,833	506,070	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do										"	2,500,000	6	87½	1885	
do do										"	700,000	6	90	1880	
do do										"	1,128,500	6	92	1875	
do Washington Branch.....	Md.		30	1,650,000						"	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind	118	118	1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7	85	1866	
do do										2d "	160,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	122½	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	132½	75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000	6	100	1864	
Camden and Amboy.....	N. J.		96	3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	450,000	6	90	1861	
Central Ohio.....	Ohio.		137		3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	200,000	7		1864	
do do										1st "	800,000	7		1864	
do do										2d "	800,000	7	62	1865	
do do										3d "	950,000	7		1865	
do do										4th "	1,365,000	7		1876	
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	105	1865 & 1870	
do do										2d "	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.		222	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d "	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						3d "	1,000,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		194	2,897,756	7,335,493	50,286	720,705	230,119	Apr. 1, 1861.	2d "	200,000		41½		
do do										Pref. 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	80	Feb. & Aug.	
do do										2d "	3,600,000	7	52½	Feb. & Aug.	
Chicago and Rock Island.....	Ills.	50½	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	2d "	2,000,000	6	24	May 1.	
Chicago, Burlington and Quincy.....	"	70	138	4,689,340	4,814,515		1,514,428	761,830		1st Mortgage.....	2,000,000	7	105	1870	
do do										Cons. 1st Mort. S. F.	2,172,000	8	105½	1863	
do do										" 2d " S. F.	813,000	8		1890	
do do										1st Mor. Chi. & Aur.	399,000	7		1867	
do do										2d "	303,000	7		1869	
do do										1st "Cent. Mil. Tract	392,000	7		1864	
do do										2d "	215,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.		60	2,155,800	1,356,000		644,928	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	550,000	7	90	1880	
Cincinnati, Wilmington & Zanesville ..	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
do do										Income.....	305,500				
Cleveland and Mahoning	Ohio.		68½	1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d "	469,000	7			
do do										3d "	344,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	21½	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	7½	1860	
do do										2d " M. L. or 1st Ex.	1,182,000	7	64	1873	
do do										3d 2d Ex.....	1,165,000	7		1865	
do do										4th 3d Ex.....	1,154,000	7	65		
Cleveland and Toledo.....	Ohio.	42½	148	3,343,800	3,850,670	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	359,000	7	65	1867	
do do										1st " 2d Div.	263,000	7	65	1872	
do do										2d "	265,000	7		1862	
do do										1st " Tol. Nor. & Cleve	521,000	7	75	1863	
do do										2d " "	293,300	7	75	1863	
do do										Junction Income..	44,500	7		1862	
do do										C. & T. Income....	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	116½	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	125	98½	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	9	99	1861	
do do										2d "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	87½	54½	1,490,000	290,700	50,500	See L. Miami.			Dividend.....	272,700	92		1860 to 1866	
Columbus, Piqua and Indiana.....	"		103	In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"		142	2,176,666	2,512,000					2d "	2,212,000	8			
Dayton and Western.....	Ohio.		38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	50		
Detroit and Milwaukee.....	Mich.		186	No report						1st Mortgage.....	2,500,000	7		1875	
do do										2d "	1,000,000	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.		111	No report											
Dubuque, Marion and Western.....	Ohio.		51	No report											
Eaton and Hamilton.....	Ohio.		36	469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.		132	986,061	1,219,100	249,668	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.											
Galena and Chicago Union.....	Ills.	5	121	6,038,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	400,000				
do do										2d "	180,000		109	1862 & 1863	
Great Western	Ills.		175	1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage.....	1,993,000	100		May 1, 1875	
do do										2d "	1,320,000				
Green Bay, Milwaukee and Chicago...	Wis.		84	400,000	No report	75,000	63,141	13,573		1st Mortgage W. D.	1,041,000	10	7		
Greenville and Miami.....	Mo.		32	300,000	473,000					1st "	1,350,000				
Hannibal and St. Joseph.....	Mo.		206	1,041,086	10,554,000	220,356	996,907	512,933	Sept. 1, 1860.	Land mortgage...	5,000,000		47		
do do										Mortgage Conv.....	1,354,000		30		
Hartford and New Haven.....	Conn.		62	2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	927,000	6	99	1873	
Hudson River.....	N. Y.	44½	144	3,738,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	107½	1869 & 1870	
do do										2d "	2,000,000	7	86½	1840	
do do										3d "	1,840,000	7	88	1875	
Illinois Central.....	Ills.	60½	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional Construction.....	38,000	7	64	1863	
do do										"	12,885,000	7	93½	1875	
do do										"	4,115,000	6			
do do										Debentures.....	42,740	7			
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,900	Jan. 1, 1860.	1st Mortgage.....	600,000	7			
do do										2d "	578,000	10			
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,284	140,689	448,858	230,834		Income.....	38,700	10			
do do										1st Mortgage.....	500,000	7	85	1866	
do do										2d "	400,000	7	85		
Indianapolis, Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort...	200,000	7	68		
do do										1st Mortgage.....	649,984				
Iowa Central Air Line.....	Iowa.			245,000	755,000					2d "	314,000				
Iron.....	Ohio.		13	118,865	50,000		No report	No report							

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.	
Iron Mountain.....	Mo.		86½	\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000					
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st	279,000	7	75	1861		
do										2d	392,000	7	70	1873		
Kentucky Central (Covington and Lexington).....	Ky.		99	Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6				
do										1st	260,000	7				
do										2d " Conv.	1,000,000	7				
do										3d	600,000	7				
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiver.						1st Mortgage B. D.	903,000		89			
do										2d " E. D.	1,000,000					
do										1st Land Grant W D	4,000,000		20			
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report			1st Mortgage.....	130,000	6				
Lexington and Frankfort.....	Ky.		29	514,433	130,000		103,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883		
Little Miami.....	Ohio.	100	65				1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000					
Louisville and Frankfort.....	Ky.		65	1,169,50	384,519		245,910	98,679	June 30, 1861	1st Mortgage.....	248,000					
do										1st Mortgage.....	2,000,000	7				
Louisville and Nashville.....	Ky.		268	5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000					
do										1st " Memphis Br.	500,000					
Louisville, New Albany and Chicago..	Ind.		288	2,800,000	3,000,000	200,000	645,827	371,402								
do																
Madison and Indianapolis.....	Ind.		87	1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861		
Marietta and Cincinnati.....	Ohio.		208	8,561,213	196,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868		
do										2d	2,000,000	7				
do										3d	1,500,000	7				
do										Sterling Income.....	333,000	4				
Michigan Central.....	Mich.		60½	284	6,037,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	Domestic	928,617	6	98½	1872	
do										1st Mortgage's Sterling	467,483	8	84	1869		
do										1st " Conv.	500,000	8	96	1860		
do										1st " unconv.	250,000	8	104	1869		
do										1st " Dollar Conv.	2,598,000	8	105½	1862		
Michigan South'n & North'n Indiana	Mich &		25½	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	1st " S. F. Conv.	4,153,000	8	99	1860	
do										Mort. Mich. So.....	991,000	10½	106½	1861		
do										" Nor. Ind.....	985,000	100½	98	1885		
do										" Goshen Line.	1,168,600	81		1877		
do										S. F. Toledo	2,850,000					
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182		2d Mortgage	2,465,000	8				
do										1st Mortgage.....	400,000	8				
Milwaukee and Horicon.....	Wis.		42	1,101,200						2d	200,000	7				
do										1st Mortgage.....	420,000	8				
Milwaukee and Prairie du Chien.....	Wis.		39	192	4,944,000	2,556,000	883,186	439,943	Dec. 31, 1860.	2d	600,000	7	96	1891		
Milwaukee and Western.....	Wis.		71	No report						1st Mortgage.....	2,556,000	8				
Mississippi and Missouri.....	Iowa,		55	No report						1st Mortgage Conv.	1,000,000	7				
do										2d " S. F.	400,000	8				
do										Oskaloosa Div.....	1,425,000	7				
do										Land Grant.....	7,000,000	7				
New Jersey.....	N. J.		13	34	4,397,800	688,000	992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000		102½			
New Jersey Central.....	N. J.		64	64	2,290,000	3,186,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	3,000,000		105½			
New York and Erie Pref.....	N. Y.		63	Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860.	2d	4,000,000		105			
do			35½							3d	6,000,000		97			
do										4th	4,900,000		89½			
do										5th	1,792,500		88½			
New York and Harlem Pref.....	Conn.		34½	138	5,717,190	6,035,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	102½	1873	
do										2d	1,000,000	7	100	1864		
New York and New Haven.....	Conn.		133		3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	6	94	Dec. 1, 1866	
do											978,000	6		Oct. 1, 1875		
New York Central.....	N. Y.		86½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.	7,925,000	6	100	May 1, 1883	
do										Mortgage.....	3,000,000	6	105	June 15, 1884		
Northern Central.....	Md.		138		2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,066,500	6		1885	
North Missouri.....	Mo.				2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6			
Ohio and Mississippi, Eastern Div.....	Ohio & Ind		192		Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6			
do										3d	316,925					
do										Construction.....	4,637,920					
Ohio and Mississippi, Western Div.....	Ills.		148			3,292,403	No report			Income.....	3,591,183					
Pacific.....	Mo.				3,199,662	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000	6			
do										" S. W.....	2,800,000	6				
Pennsylvania.....	Pa.		359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	Construction.....	4,500,000	6			
do										1st Mortgage Conv.	4,905,000	6	104	1888		
do										2d	2,319,000	6	98½	1875		
do										2d " Sterling.	1,957,440	6		1875		
Peru and Indianapolis.....	Ind.		74		1,100,000	820,000	80,000	No report		State Works.....	7,200,000	5	89			
Philadelphia, Wil. & Baltimore.....	Del.		98		5,600,000	2,310,000	1,236,597	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6	99½	1884		
do										Improvement.....	119,000	6		1863		
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		467		Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	1st Mort. O. & P.....	1,000,000	7		1865	
do										2d	750,000	7		1866		
do										1st " O. & I.....	1,000,000	7		1872		
Pittsburgh and Connellsville.....	Pa.		49		1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	2d	380,000	7		1873	
Racine and Mississippi.....	Wis.		104		2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.	Pittsburgh Subs'n.	500,000				
Sandusky, Dayton and Cincinnati..	Ohio.		170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856	
do										"	997,000	7		1866		
Sandusky, Mansfield and Newark....	Ohio.		125		848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,000,000	7		1875	
Seoto and Hocking Valley.....	Ohio.		56		404,975	500,000	100,000	110,200	53,100			7		1886		
Springfield, Mt. Vernon & Pittsburgh..	Ohio.		50		1,000,000	1,050,000	200,000			1st Mortgage.....	500,000					
do										2d	450,000					
Steuensville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870		
do										2d	900,000	7		1865		
Terre Haute, Alton and St. Louis.....	Ills.		208	No report						1st Mortgage Conv.	1,000,000	7	105	1862		
do										2d " Conv.	2,000,000	7	85	1868 & 1870		
do										1st " Bel. & Ill.	517,000	7		1873		
Terre Haute and Richmond.....	Ind.		100	73	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7		1866	
Toledo, Wabash and Western.....	Ohio & Ind		5½	243	2,123,500	3,906,049	52,389	233,546		1st Mortgage.....	3,400,000	7		Aug. 1, 1885		
do										2d	2,500,000	7		Nov. 1, 1878		
do										Mort. Coupons.....	96,419	7		1885		

300 gallons of dilute acid are employed at a time, a pump made throughout of lead, mixed with a little antimony to give hardness to its substance, being used to pump up the acid from the bottom and into a reservoir at the top, whence it falls again, streaming through a lead plate perforated with a great number of small holes. The acid solution becomes in this way saturated with the ammonia present in gas, and is then evaporated for sulphate of ammonia, a salt in request by alum and manure manufacturers, and bringing from £13 5s. to £13 10s, a ton, the commercial sulphuric acid employed in the process costing about £7 a ton. The ammoniacal liquor is treated also for the same salt. A similar apparatus is employed at the Crystal Palace District works. At the London, and at the Surrey Consumers' works, the ammoniacal liquor from the main is first boiled in an iron boiler, and what goes over is taken into a lead tank, where it is saturated with its equivalent of sulphuric acid, and evaporated by steam contained in lead pipes which are made to traverse the tank close to the bottom. At most or all of the other works the ammoniacal liquor is sold to the manufacturing chemists. At the City Gasworks, where both scrubbers and washers are used, the latter are supplied with a solution of hydrochloride of manganese to the strength of 32 on Twaddle's hydrometer, and after this solution has become saturated with ammonia it is sold to the chemists, who evaporate it for sal ammoniac (chlorohydride of ammonia).

Those curious as to motors may be interested to know that, at the City Gasworks, the agitators in the washers are worked by an overshot water wheel, for which the water is pumped up, at high tides, by a steam engine. The washers require to be constantly in motion, and were they driven by steam, an engineman would have to be always in attendance. As it is, the engine pumps up enough water in a few hours to supply the wheel for a whole day. The wheel is not far from 25 ft. in diameter, but exceedingly light, and the water is let on to the top buckets through three pipes, each perhaps 1 in. to 1½ in. in diameter, and placed one in advance of another, so as to discharge into three buckets at the same time. The work to be done is very light, the agitators, once in motion, taking the liquid around with them, and which, indeed, only requires to be kept in motion to prevent the deposition of the hydrochloride of manganese in solution.

Another curious mode of obtaining power was resorted to some years ago, at the Johnstone Gasworks, near Glasgow, a small fan being placed in the chimney, where it was worked by the strong draught, and thereby made effective as a motor for driving the exhausters.

We have followed the process of gas making up to the purifiers. Coal gas contains many impurities, as ammonia, sulphuretted hydrogen, carbonic acid, bisulphide of carbon, etc. The ammonia is removed by passing the gas through water, as in the scrubbers already noticed, and which are thus properly to be included with the purifying apparatus. The term "purifier," however, is technically applied only to those vessels in which the gas is freed from sulphuretted hydrogen, one of the most offensive impurities of all. Dr. Henry and Mr. Clegg were the first, more than fifty-five years ago, to employ lime for the purification of gas, and Mr. Clegg soon after adopted the separate purifying vessels, the first application of lime having been in the tank of the gas holder itself, from which the saturated material could only be with-

drawn with much inconvenience. Lime, both as a hydrate and in solution, has a strong affinity for sulphuretted hydrogen, with which it forms a hydro-sulphuret of lime, in itself an exceedingly offensive compound. Wet lime purifiers have been much used, the solution being in the proportion of one bushel of slaked lime to twenty-four or twenty-five gallons of water. Through this mixture, kept in constant agitation, the gas was made to pass, rising, thence, practically purified and fit for lighting, into the gas holder. The removal, when necessary, of the spent lime was a disagreeable task, and exact great care was taken, the stench extended over the whole neighborhood.

At the present time there are, we believe, three gasworks in London, to-wit, the Vauxhall and Bankside stations of the Phoenix Company, and the Curtain road works of the Chartered Company, where wet lime is employed in the purifiers. At the Phoenix Company's works the spent lime is run into tanks under the retorts, and the waste heat sent over it, so as to evaporate the fluid portion, which goes up the chimney stack in vapor, leaving the lime in a comparatively inoffensive state behind. At the Bankside station the heat was originally applied beneath the waste lime tanks; but this baked the lime upon their bottoms, so that, after a short time little heat could pass through to the fluid portion at the top of the tank. A change was therefore made, and the heat reverberated from the crowns and sides of the arches, under the benches of retorts, full upon the surface of the lime, and this plan has answered very well. At the Vauxhall station the heat first strikes down upon the top of the lime, afterwards passing along the bottom of the tanks. With these arrangements the Phoenix Company's works are not worse, in point of smell, than those of the other London companies, the characteristic odor of purified coal gas and the pungent scent of ammonia being about all that a visitor, with ordinary olfactory acuteness, would be likely to notice in this respect.

The purifying agent now generally adopted at the various gasworks of London is a hydrated oxide of iron. Edward Heard, who patented the use of lime, for purifying coal gas, as long ago as 1806, pointed out that, among other substances, metallic oxides, including that of iron, would take up and retain sulphuretted hydrogen. But from the best authorities it appears that some of the other oxides mentioned by Heard would not arrest the impurity in question, so that his knowledge of the action of all the oxides must have been imperfect. Afterwards, in 1840, Mr. Croll took out a patent, chiefly for the purification of gas from ammonia, but he stated in his specification that the sulphur might be arrested by the black oxide of manganese, or the oxide of zinc, or the oxides of iron. As, however, an anhydrous oxide of iron will not act upon sulphuretted hydrogen, Mr. Croll's specification and claim were manifestly incomplete. Mr. Laming, in one of his patents, afterwards pointed out the advantage of employing oxide of iron with chloride of calcium in purifying gas, but nothing appears to have been done to bring artificially hydrated oxides of iron into use for the purposes of purification, until Mr. Frank Clarke Hills, of Depford, began to introduce them, under his patent of Nov. 28th, 1849. On the passage of the gas through the oxide, the latter and the sulphuretted hydrogen are mutually decomposed, the oxide giving up its oxygen which unites with the hydrogen of the sulphuretted hydrogen, the sulphur at the same time uniting with iron, form-

ing a sulphuret of iron. Could this decomposition be effected at once, so that the de-oxidised purifying material could not again be used, the cost of a metallic oxide would preclude its use altogether. But in consequence of a chemical re-combination which, according to Dr. Ure, was first observed by Mr. Frederiek J. Evans, the manager of the Horseferry road station of the Chartered Gas Company, the sulphuret of iron precipitates its sulphur on exposure to the air, and again combines with oxygen, occasionally with such energy as to take fire. This revived thirty or forty times. We have, indeed, heard that the natural oxide, used at the Horseferry road works is used sixty or seventy times over before it becomes too inert to render further service. Every time the sulphuret of iron is revived to the condition of oxide it precipitates its sulphur, which remains in mechanical mixture with the mass, and in this way the weight of the whole finally becomes 30 or 40 per cent. greater than the original weight of the oxide, the excess being sulphur alone. Notwithstanding this presence of sulphur in the revived material, the gas does not take it up in fresh combination. Any quantity of gas might, indeed, be passed through crushed sulphur without becoming at all sulphuretted.

[To be Continued.]

CHICAGO AND ROCK ISLAND RAILROAD. IMPORTANT IMPROVEMENTS.—During the past year some sixty stone culverts of different sizes have been built on this road, in place of more temporary structures, several bridges have been rebuilt; the long line of trestle-work, across the bottom, on the west side of Rock river, has been filled in with earth, protected by stone wall, the remainder of the bridge being of substantial truss, supported by permanent stone piers. Several thousand new ties, and considerable new iron was laid last year. This year, 20,000 new ties and 20 miles of new iron will be put down, using the most improved chairs, and the famous Joliet gravel ballast.—*Western R. Gaz.*

LOCOMOTIVES IN INDIA.

The opening of the railway from Umritsir to Lahore, at the beginning of last month seems to have excited interest among the Panujabees even more intense than that felt even by the Bengalees in 1854. Day after day thousands congregate, from the most distant places, to see the Lawrence locomotive come into Umritsir. Its fame has spread to the Peshawur and Mooltan frontiers. Some daring spirits insist on a ride on the "fire horse," just as the Bengalees used to crowd round to examine the new "car of India," and would not be convinced of the danger they incurred till a cow was killed standing on the line. A Brahmin, looking on the locomotive at Umritsir, remarked, "All the incarnations of all the gods in India never produced such a thing as that." By this time the news has been carried by the trading caravans into Cabul and Central Asia, and so our prestige increases.—*London Engineer.*

COTTON PLANTING.—Members of Congress from Illinois state that cotton will be extensively cultivated in their State this year. The Ill. Cent. R. R. Co. have prepared 2,000 acres for this purpose. The secret of success in the cultivation of cotton in this climate is—pinch off the shoots whenever say three or four boles have developed themselves, so that no more boles are formed on the branches than the plant will be able to mature before frost.

MONETARY AND COMMERCIAL.

The actual condition of the money market is not very different to what it was a week ago. Although there is a more buoyant feeling consequent upon the prospect of the speedy opening of navigation on the Mississippi. If there should be anything like an active river trade, the demand for money will be much greater than it usually is during the summer months.

Exchange is in fair demand, with a supply sufficient to meet it. The market rules steady at quotations:

	BUYING.	SELLING.
New York.....	par	1/2 @ prem.
Boston.....	par	1/2 @ prem.
Philadelphia.....	par	1/2 @ prem.
Baltimore.....	par	1/2 @ prem.
Gold.....	21 @ 3 prem.	3 3/4 prem.
Silver.....	1 @ 1 prem.	2 1/2 @ 2 1/4 prem.

The banking house of Kinney, Espy & Co. has undergone a change by the withdrawal of Mr. James Espy, the partnership heretofore existing having expired by limitation. The new firm, composed of the remaining partners, Messrs. E. Kinney, M. W. Lodwick, John G. Peebles and George Johnson, have associated with them John D. Kinney and W. B. Whipple, and will conduct business under the firm name of E. KINNEY & Co.

Thompson's Bank Note Reporter speaking of the National finances, says. Sixty days before Mr. Buchanan gave place to Mr. Lincoln, it became necessary to borrow on Treasury Notes bearing 1 per cent. per month interest, in order to save the Government from bankruptcy. The entire Federal debt at that time was less than eighty millions; but Cobb (Buchanan's Secretary of the Treasury), Floyd (Secretary of War), and Thompson (Secretary of the Interior), had purposely prostrated the power and credit of the Government, and it required more nerve to buy a 12 per cent. Treasury Note then, at par, than to buy a 7 3-10 now, at 5 per cent. premium. For then the country had no Government, but now we have a Government.

The war up to the present time, has cost, in round numbers, \$400,000,000. Thus:

7 3-10 Treasury Note Bonds.....	\$125,000,000
6 per cents of 1861.....	50,000,000
Demand Notes (no interest).....	130,000,000
12 month Certificates (5 per cent.).....	45,000,000
Deposits with Treasury (5 per cent.).....	50,000,000
Total war debt.....	\$400,000,000

The floating debt now outstanding is a fair offset to the 12 month and 2-year Treasury Note debt, issued before the war, and paid from the \$400,000,000 above.

Adding the old Federal debt to this war debt, we have a national debt of less than five hundred millions: and taking the average rate of interest the Government is paying on this debt, we find it to be 4 1/2 per cent. per annum. The interest paid on the debt made since the war broke out, averages only 4 per cent., the old debt bearing a higher average rate of interest than the war debt.

That the Federal Exchequer has been managed with great ability, is apparent from these results. That the united and determined ac-

tion of the people of the North, in saving the Union, is the foundation for these results, is an equal truth. This country has more vitality than any nation on earth, and with such a tax bill as Congress has by a resolution pledged itself to pass, Federal Stocks are the best paper security made.

The same authority says, the Beverly Bank, New Jersey, was thrown out here on Friday, the 23d inst. This bank was owned by the parties implicated in the bogus issue of the Indiana State Stocks.

The Northwestern Bank, Warren, Pa., was thrown out on Monday, the 26th inst. This bank closed up because the excitement created by the failure of the Beverly Bank caused the redemption to exceed the issues. So the owners "shut down the gate at full tide."

It is safe to act on the principle that both banks are dean broke.

The state of the grain market, and growing crops in England, has become a matter of importance to American farmers; the English demand for a year or two past has governed the price of wheat in this country, and it is likely to another year. The *London Mark Lane Express*, by a complete system of correspondence throughout the kingdom, keeps its readers posted upon the state of the crops and markets, in the most perfect manner of any journal in the world. We have already drawn from its columns valuable information for our readers upon the growing wheat crop, and from the paper of Monday, May 12, we select the following. It says:

"MARK LANE, Monday, May 12.—There was a tolerably good show of English wheat this morning, which comprised part of last week's supply left over. The trade to-day has been very slow, and the business done was at a decline of 3s. per quarter from the rates of this day se'nnight. Where sales of foreign are pressed, a reduction of 2s. per quarter must be submitted to."

[A quarter of wheat contains eight imperial bushels, and an imperial bushel contains 2,218.192 cubic inches, while our American measure is the old Winchester bushel, containing 2,150.42 cubic inches—so that the English measure is 68.150 cubic inches larger than ours. This difference in measure must be always calculated in comparing prices.]

"The foreign trade was unsettled; good Winter American and red Baltic were only about 1s. per quarter lower, but Dantzic from ship-side was down quite 2s. per quarter lower, without one transaction.

"The wheat trade in the country was very generally influenced by the fine forcing weather experienced in the earlier part of the week. Scarcely anywhere were former rates realized, and then it was the consequence of very short supplies, as was the case at Hull and Newark; more generally there was a reduction of 1s. to 2s. per quarter, as this was quoted at Birmingham, Boston, Barnsley, Ipswich, Melton Mowbray, Louth, Lynn, Sleaford, Worksop, and Walsall; at Bourn the reduction was 1s. per quarter; so it was at Gaineborough, Market Harborough, Gloucester, and several other places.

"Without much abatement of the heat the

brilliance of the weather has been broken, our fears being partly realized by a return of heavy rain on Wednesday, with a storm in Yorkshire of unusual violence and injury. Still this has not been enough to recover the downward tendency of the markets. Spring, with a few days of exception, has been too summer-like to be safe. Already we hear that the finest and most forward pieces of wheat has been sadly knocked about, so that the first in point of promise is getting into danger. If, then, through an unseasonable and rank growth the coming crop is already threatened, our dependence on an early abundance must be thus early shaken. The telegraph is not yet so far advanced as to give us an afternoon view of the crops throughout Europe, but it would seem that nearly all over the continent the season has been forward, and our anticipated reduction of prices in the chief shipping ports has become a fact. Dantzic has gone down 3s. to 5s. per quarter for wheat, and Hamburg fully 3s. per quarter. France and the nearer countries are about 1s. 6d. per quarter lower. In Italy, five weeks of continued fine weather will settle the assurance of plenty; and though Odessa, by its distance and a steady regular demand, is less affected from sudden changes in the West than other ports, prices there for the best quality are 1s. per quarter lower."

The following is an official statement of the business at the Office of the Assistant Treasurer, U. S., New York, during the month of May, 1862:

RECEIPTS.	
May 1, 1862, By Balance.....	\$57,210 85
On account of Customs.....	\$4,716,354 68
On account of Patent Fees.....	5,460 10
On acct of Post-Office Dept.....	355,882 60
On acct of Loans.....	17,055,787 94
On acct of Miscel. & Transf.....	10,367,340 42—
Total.....	\$32,550,825 74
	\$32,558,035 59

PAYMENTS.	
Debit Balance.....	\$999,803 32
Treasury Drafts.....	28,869,997 39
Post Office Drafts.....	248,301 11
Balance, May 31, 1862.....	\$2,439,934 77
By Balance, Cr. Disbursing Accounts.....	\$12,731,244 81
By Receipts during month.....	25,877,654 50—
To Payments.....	26,485,947 52
Balance.....	\$12,122,981 79
By Balance, Cr. Interest Accounts.....	\$585,194 65
To Payments, including purchases.....	35,614 86
Balance.....	\$549,579 80
By Receipts for Customs in May, 1862.....	\$4,715,354 68
By Receipts for Customs in May, 1861.....	767,943 20
Increase in May, 1862.....	\$3,948,411 48
By Balance Cr., Bullion and Expense Account for Assay Office.....	\$ 97,897 15
By Coin received during month.....	\$62,567 80
By Fine Bars rec'd during month.....	76,749 94—
Total.....	\$237,214 89
To Payments in Coin.....	\$81,209 56
To Payments in Fine Bars.....	81,476 08—
Balance.....	\$74,529 25

By Funds in hand in Ass't	
Treas'r's Office.....	\$15,112,496 36
By Coin in hand, Assay Office.....	64,937 60—
By Fine Bars, Assay Office.....	9,591 65
By Unparted Bul'n, Assay Office.....	202,513 00
By Bul'n at Mint for Coinage.....	9,073 24—
Total.....	\$15,398,611 85
Less due depositors.....	57,712 35
Balance.....	\$15,340,899 50

STATEMENT of Business at the United States Assay Office at New York, for the Month ending May 31, 1862.	
Deposits of Gold.....	\$86,000 00
Foreign Coin.....	\$19,000 00
Foreign Bullion.....	13,000 00
United States Bullion.....	54,000 00
Deposits of Silver, including purchases.....	22,000 00
Foreign Coins.....	9,500 00
Foreign Bullion.....	6,000 00
United States Bullion, (contained in gold).....	1,800 00
Washoe.....	1,700 00
Lake Superior.....	3,000 00

Total Deposits, payable in bars.....	51,000 00
Total Deposits, payable in coins.....	57,000 00—
Gold Bars stamped.....	123,487 75
Transmit'd to U. S. Mint, Phila., for coinage.....	71,332 71

General Railroad Arrangement.**UNION TICKET OFFICES.****LITTLE MIAMI AND COLUMBUS**

AND

XENIA RAILROAD.**TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED**

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:30 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

**Cincinnati Hamilton and Dayton
RAILROAD**

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	9:00 P. M.	10:10 A. M.
Day, Toledo & Day, Huntsville.....	5:30 P. M.	10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Terre Haute and Lafayette and Chicago Mail.....	5:05 A. M.	11:10 A. M.
Indianapolis and Chicago Night Express.....	3:20 P. M.	11:50 P. M.

**Ohio and Mississippi Railroad.
CINCINNATI TO ST. LOUIS.****TWO TRAINS LEAVE CINCINNATI DAILY.**

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

ns run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
u sville and St. Louis Mail.....	5:00 A. M.	10:05 F. M.
ymour Accommodation.....	3:00 P. M.	8:45 A. M.
nsville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

P. W. STRADER.

General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

W. H. L. NOBLE.

General Ticket Agent Indianapolis & Cincinnati Railroad.

E. F. FULLER.

General Ticket Agent Ohio & Mississippi R. R.

**McCALLUM, BRISTOL & CO.,
BRIDGE & DEPOT BUILDERS.**

McCallum, Bristol & Co., are prepared to construct **McCALLUM'S PATENT INFLEXIBLE ARCH TRUSS BRIDGE**, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge and in the most approved and perfect manner. Parties desiring information, will please apply to the firm at their Office 99 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y.

Ag. 26.

**MIDDLETON & STROBRIDGE,
LITHOGRAPHERS AND ENGRAVERS.**

Walnut St., CINCINNATI.

Special attention given to all kinds of work in outline, such as Show Cards in one or more colors, Maps, Bonds, Portraits, Certificates of Stock, &c., &c.

J. T. CRAPSEY,**ATTORNEY AT LAW,**

OFFICE:

N. W. Cor. Walnut & Sixth streets,

my21

CINCINNATI

ERIE RAILWAY.**Great Broad Gauge, Double Track
and Telegraph Route**

TO

NEW YORK, BOSTON,**AND ALL EASTERN CITIES,**

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

feb 6.

CHARLES MINOT, Gen'l Sup't.

Baltimore and Ohio Railroad**RE-OPENED!**

This great national thoroughfare is again open for

Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition,

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.

J. H. SULLIVAN, Gen. W. Ag't, Bellaire, O.

L. M. COLE, Gen. Ticket Agent, Baltimore.

**CHICAGO, GREAT WESTERN AND
NORTH-WESTERN LINE—INDIANA-
POLIS AND CINCINNATI SHORT-LINE****SHORTEST ROUTE BY THIRTY MILES.**

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily for the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M. Chicago at 6:00 A. M., connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.

W. H. L. NOBLE,

General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

**KNOX & SHAIN,
Engineering and Telegraphic**

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums 4th by Franklin Institute.)

OHIO & MISSISSIPPI**RAILROAD.****CINCINNATI AND ST. LOUIS.****Through without Change of Cars.****TWO DAILY TRAINS FOR VINCEN-
NES, Cairo, and St. Louis.**

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.

RETURNING.—Mail Train Leaves East St. Louis, (Sundays excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M. arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office No. 5 East Third street; No. 1 Burnet House, corner of north-west corner of Front and Broadway; Spencer House; and at the Depot, corner of Front and Mill Streets G. B. McCLELLAN, Gen'l Superintendent

Omnibuses call for Passengers, Novemb 11th, 1861.

1861. 1861
FAST TIME.
LITTLE MIAMI
 AND
COLUMBUS AND XENIA
 AND
CINCINNATI, HAMILTON & DAYTON
RAILROADS.

On and after SUNDAY, Nov. 10. 1861, Trains depart as follows:

7:30 A. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express.—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation.—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation.—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Richmond, Indianapolis, and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation.—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express.—From Cincinnati, Hamilton and Dayton Depot.—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Benwood; via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,
General Ticket Agent
Omnibuses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
 No. 67 West 6th St. bet Walnut & Vine
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W. MORRILL. G. B. BOWERS
MORRILL & BOWERS,
 (Successors to and members of the late firm of
 C. WASON & CO.)

CLEVELAND, OHIO,
 Are prepared to execute all orders or
Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.
 Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.
 Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in every case.

1862. 1862.
Pennsylvania Central R.R.
285 MILES DOUBLE TRACK.



(With its Connections)
 IS A FIRST CLASS ROUTE,
 FOR SAFETY, COMFORT AND SPEED,
 TO ALL THE EASTERN CITIES!
 THE TRACK IS STONE BALLASTED
 AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
 (with close connections from Western Cities,) ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
 AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE AND WASHINGTON.

FROM PITTSBURGH TO NEW YORK
 ONE TRAIN RUNS DAILY (430 MILES,) VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
 Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
 BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL PORTS AS LOW AS ANY ROUTE.

SLEEPING CARS.
 ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.
 By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, and Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburg with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
 D. A. STEWART, Freight Agent, Pittsburgh.
 CLARKE & CO., Transfer Agents, Pittsburgh.
 R. C. MELDRUM & CO., Madison, Indiana.
 J. E. MOORE, Louisville, Ky.
 W. W. ATKMAN & CO., Evansville, Ind.
 R. F. SASS, St. Louis, Missouri.
 CLARKE & CO., Chicago, Illinois.
 W. H. & E. L. LANGLEY, Gallipolis, Ohio.
 G. B. NEAL, Parkersburg, Virginia.
 HALL & CO., Marietta, Ohio.
 H. S. PIERCE & CO., Zanesville, Ohio.
 McDOWELL & McCORM, Portsmouth, Ohio.
 R. MCNEELY, Maysville, Ky.
 J. P. JOHNSTON, Kiptley, Ohio.
 JOHN TODD, Covington, Ky.
 G. L. HEATON, Cleveland, Ohio.
 R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.
 Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.
 ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
 L. L. HOUSTON, Gen'l Ticket Agent, Philadelphia.
 H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

BUSH & LOBDELL.
Chilled Railroad Car Wheel, Tyre,

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Railroad Machine Works,
Wilmington, Delaware,
 MANUFACTURE

CHILLED WHEELS

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TYRES,
FOR RAILROAD CARS

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LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their
CELEBRATED WHEELS.

Either Single or Double Plate,
 With or without Axles.

WHEELS FITTED
To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on
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A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

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FINDINGS

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MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET
NEW YORK.

ALBERT BRIDGES. JOEL C. LANE

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

through Distance 280 Miles;
 42 Miles Shorter than any other Route
NEW SLEEPING CARS ON ALL NIGHT TRAINS.

passenger Trains leave C., H. and D. Depot, at 7:30 A. M., 3:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without rebilling or transhipment.

JOHN BRANT, Jr., Superintendent.
 C. E. FOLLETT,
 General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent,
 33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON,
STOCK BROKER,

No. 21 West Third Street,
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Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and takes collection.

LOW'S RAILWAY DIRECTORY

FOR 1861

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THE NAMES AND RESIDENCES

OF THE

PRESIDENTS, DIRECTORS

AND

OFFICERS

OF ALL THE RAILROADS IN THE

UNITED STATES

If they could be ascertained.

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M. W. BALDWIN & CO.
ENGINEER'S

BROAD AND HAMILTON ST.'S

Philadelphia, Pa.

Would call the attention of Railroad Managers, and those

interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned

THEODORE DEHON,

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Broadway, New York

EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,

LOCOMOTIVE & RAILROAD
CAR SPRING

MANUFACTURER,

WILMINGTON, DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky.,

Lafayette, Ind.,

Indianapolis, Ind.,

Columbus, O.,

Dayton, O.,

Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE ON BOTH SIDES, impossible to unravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, JUNE 12, 1862.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
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OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

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Subscriptions and communications addressed to
WRIGHTSON & CO.,
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Arrival and Departure of Trains.

Little Miami—	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.30 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.40 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	11.10 A. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.10 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	6.00 A. M.	5.43 A. M.
Bellefontaine Accommodation.....	5.20 P. M.	6.45 P. M.
Marion & Cincinnati—		
Mail.....	8.00 A. M.	10.00 A. M.
Accommodation.....	3.30 P. M.	5.20 P. M.
Ohio & Mississippi—		
Mail.....	5.05 A. M.	10.05 P. M.
Seymour Accommodation.....	3.00 P. M.	8.45 A. M.
Express.....	5.00 P. M.	6.53 A. M.
Indianapolis & Cincinnati—		
Mail.....	5.05 A. M.	11.10 A. M.
Chicago Express.....	3.30 P. M.	11.50 P. M.
Dayton & Michigan—		
Toledo, Detroit & Chicago Exp.....	6.50 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	10.40 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.
Kentucky Central— (City time.)		
First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.
The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.		
Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.		

MILITARY RAILROADS FOR THE DEFENSE OF OUR NORTHERN AND NORTHWESTERN FRONTIERS.

THE *Detroit Tribune* is advocating the construction of a *Military Railway* through Michigan by the straits of Mackinac to the west end of Lake Superior; and which the *Tribune* regards of vast importance, and highly necessary for the protection of western lake commerce. The *Tribune* very truly remarks that "if there is any propriety in providing means of defense on our sea coasts at the expense of the West, there is equal propriety that our lake interests be protected also. The commerce of the lakes is one of the few great interests of this country, demanding much greater consideration than it has received of the Government or at the hands of its own Representatives in Congress. The great Northwest, bordering on Lake Michigan, or connected with it by railroads, has a great interest in the proper fortification of the Straits of Mackinac, where necessarily passes their great commerce. Probably no point of our country is so favorably situated as the northern extremity of our lower peninsula, to give efficient and economical protection to such interests as those of Lake Michigan. The narrow passage of the Straits may be effectually closed to the entrance of our enemies' vessels. A fort, gunboats and armed merchant vessels are not all that is necessary. Access must be had by railroad to that and other points, as Sault St. Mary and Superior City, to furnish needed facilities to repel any aggression upon our territory, without any delay."

To this there can be no dissenting voice; for, in the language of the late report to Congress of the Committee on Lake Defenses, "the Northwest has grown by the energy and industry of its own hardy free people, receiving less aid from the Federal Treasury than any other section. * * * As compared with the South, the Northwest has literally received nothing from the National Treasury. * * * There has been expended on the Gulf of Mexico and the Florida coasts more millions of dollars than the Northern frontiers has received thousands. The East has had, and very properly, fortifications, forts, armories, navy yards, depots, arsenals, and ships. The Northwest asks simply justice, but not even that at this time. In the midst of this war, she asks only that some of her most important, leading and exposed points be fortified and placed in a condition of defense. * * * Probably the most important strategic place on the lakes is the Straits of Mackinac. * * * Fortifications on the Straits of Mackinac close the opening or entrance into this great inland sea. * * * Mackinac should be made the Gibraltar of the lakes."

Gen. Totten, upon the importance of this locality, says:

"As to the stronger works, I consider one at Mackinac to be indispensable. This will be the principal watching point of the upper lakes. Here war steamers will call to refresh, to communicate with each other, to find shelter, lie in wait, &c."

The only question that can be raised in this connection is as to the propriety of undertaking these works at this time when the country is so loaded down with the expenses of the war. If they are ever needed, it will be before they can by any possibility be constructed. In which event the true points of defense for the northern frontier will be at Montreal or perhaps Quebec—above the former of which there is no way of passing an army except by the Lachine canal, the Grand Trunk Railway, or by miserable and almost impassable mud roads. Destroy the canal and boats cannot pass from the sea to the lakes, while the United States could place hundreds of thousands of men by means of the St. Lawrence, and Lake Champlain, at La Prairie opposite Montreal, or on the plains at the mouth of the Ottawa, which would effectually dispute the upward passage of any army that England could send across the water, or that could be raised in Lower Canada. As for the upper Province, the fighting men could be disposed of, and *gobbled up*, by our western boys, long before they could get any aid from England, or get themselves in fighting array to resist the rush of the heroes of Donnellson, Shiloh and Pea Ridge.

But whether needed or not, as a means of defense—present or prospective—there can be little doubt that the proposed railway would be of great service to the Government in its frontier operations, and of incalculable advantage to the people of the west and northwest, who have responded so nobly to the call of their country in putting down this iniquitous rebellion, who have heretofore received so little "aid and comfort" from the Government. And if this road can be built without involving the country in expense, as it is claimed that it can, we shall give it our most cordial support.

In 1856 Congress gave grants of land to two railways running north through Michigan, and terminating at Little Traverse Bay thirty miles south of the Straits. These grants have not been taken up, because railways extending no farther than the bay would not be likely to pay. It is claimed, however, that if these roads could be extended to the Straits and Superior City at the head of Lake Superior, capitalists could be found to take them up at once and construct the road. The present movement is for the purpose of inducing Congress to extend the grant of land from the Straits to Superior City, whereby the building of the road could readily be secured. In this connection the *Tribune* remarks that "a liberal grant of land per mile, from Little Traverse Bay to Superior City, and to Sault St. Mary from the Straits, is all that is neces-

sary," and very truly adds that "the result will be that the present worthless Government and State and private lands, will sell for a price greatly exceeding the cost of the railroads. In proof of this statement, and of the rapid development of the State, and its great and diversified resources, we have only to refer to the effect of railroads in other States."

There can be no good reasons why the above grant should not be made; while there are many strong ones why it should be made, and made at once. In the first place the present grants will expire within four years, and unless extended so as to be made available they will be lost, and the work will be indefinitely postponed. In the next place the lands to be granted, in their present condition, are of little or no value to the Government. But if the grant were made, those lying contiguous would at once be made available and become a source of revenue to the treasury. Independent of these considerations the building of the road besides giving to Government a great military highway to its most northerly frontier, would open up to trade and commerce one of the richest and most productive mining and lumber regions of the world; at the same time giving us a connection with the great northwest by the way of the Red River of the north and Pembina, and ultimately with the Pacific by the great northern and Canadian Railways. It is to be hoped, therefore, that Congress will at once pass the grants asked for, and that before another year we may be able to announce the organization of the company and the commencement of the work.

THE GREAT ALPINE TUNNEL.

The tunnel now constructing through Mt. Cenis is probable one of the greatest feats of engineering ever attempted. The completion of this vast work has recently been assumed by the Italian Government, and is being pushed forward with as much vigor as the enormous difficulties of the undertaking will admit.

We find in a late number of *Silliman's Journal* some interesting facts touching the difficulties and the progress of the work. The mountain rises from 2,280 to 5,000 feet above the level of the gallery, which renders it impossible to operate at more than two places. Owing to the great length of the proposed tunnel—nearly seven and a half miles—manual labor was out of the question, and steam could not be used for very obvious reasons in a space so contracted. This difficulty has been met by the use of compressed air as a motive power for driving the drills, which possesses the double advantage of an economical application of power at a distance from its source, and the use of the escaping air to renew the vitiated air of the tunnel. The air is condensed at the mouth of the tunnel by an ingenious application of the hydraulic ram, so much used in many parts of the United States,

but used here on the grandest scale imaginable.

The column of water which compresses the air in the chamber of the hydraulic ram is twenty-five metres high, by sixty centimetres in diameter. The compression of the air at the moment of fall is six atmospheres. At this instant a valve yielding at five atmospheres opens, and a part of the compressed air escapes into immense boiler-iron receivers, of which five or six are required in the prosecution of the work. From these the compressed air is carried to the point of work, where it is used to work the drills, and to inject a stream of water into the blast-holes. The inventor of this ingenious apparatus is Mr. Tommelier, one of the directors of the work. It would be difficult, says our authority, to conceive anything better adapted for mountainous countries where water is abundant than this simple application of a long known principle.

Notwithstanding this facilitating of the boring and blasting, the difficulty of removing the debris from the tunnel still remains, and increases the farther the work progresses, and which is likely to seriously retard the completion, unless some other simple contrivance for the removal of the broken rock should be hit upon by the engineers. Indeed so great is the trouble likely to arise from this source that twelve years, instead of the six, first proposed, will be required to complete this great work, and let daylight through the Alps.

THE PUBLIC DEBT OF THE COUNTRY ITS BEST SECURITY.

THE following article, which we take from Hallett & Co's. late circular, is one of the ablest which appeared in that publication. It treats, as the reader will observe, upon the relation of the political unity of the country to its financial strength. From this is argued the position, that the public debt of the country is the safest security in the world. We trust that our readers will give the article a careful perusal; we feel assured that no intelligent man will consider the time lost. The following extract is alone worth a careful consideration. "With us every expenditure is identified with the preservation of what is dearest to man—his property, and the order and ideas to which he has been trained. *The debt will soon add another tie to bind still closer the Government and the people.* Being issued in sums of \$5, and upward, it will soon be distributed as widely as property itself, so that every voter, which with us means every citizen, will see in the maintenance of the Government, the preservation of the means upon which he depends, in part or whole, for support."

"In our last circular we stated the relation that the political unity of the country bears to the financial and commercial prosperity of the Government and the people, and that the contest was one for order, without which we should, like the Republics of Spanish America, relapse into anarchy, barbarism, and poverty. This fact has been most strikingly illustrated by the rapid rise in the market value of the

securities of the Rebel States, as they are reduced to subjection to the National authority. The theory is, that protection will be extended, and obedience to law enforced, under which society will be soon restored to its normal condition, and resume the discharge of the obligations resting upon it, among the most sacred of which is the public faith.

Left to itself, it is felt that the disintegrating process would go on till no considerable body of men would acknowledge any common head, so that, at no distant day, communities would be broken up into numberless clans, each hostile to the other, and all dwarfed in their means, aims, and ideas, by the petty and personal objects which would necessarily engross attention. All such tendencies, so universal at the South, are abhorrent to the truly national sentiment of the North, and must, if need be, be curbed by a strong hand. As our armies progress, consequently State stocks rise, while those of the Confederate Government fall. We have only to capture Richmond and a few other important places to render the latter utterly worthless.

The whole contest is one for the maintenance of property under the guise of the maintenance of law. As we have natural resources vastly greater than those of any other people, and as property in the Northern States is much more equally distributed than anywhere else, society there must rest on foundations more stable than in any other country. Civilized society rests upon no other basis. Property is the true conservative, and that community, consequently, is the least exposed to change, where property exists in the greatest measure and is the most equally shared. We can have no violent and radical changes at the North, because these are believed to be injurious to all and beneficial to none. Change there is rapid only as it results from growth.

No man at the North can see any way by which his condition would be bettered by any important alteration of the social structure. This section is now a unit in feeling and ideas, because it is a unit in interest. Society at the South, notwithstanding its assumed conservatism, rests upon a volcano, because one-half of the people would gladly witness its complete subversion. Some European nations are obnoxious to a similar charge. There are in all numerous classes rendered discontented by a belief that their humiliation is caused by unjust laws and institutions. But where the people are almost universally well to do, as in this country, and where universal equality exists, every member forms a portion of the base of the pyramid of society, which cannot be overturned without overturning and destroying all.

We have only to look at the public debt of this country in the light stated, which is the true one, to see that they really exceed in the excellence of their security those of any other nation, or certainly those of any other community that does not rest upon an equally immutable basis. With us every expenditure is identified with the preservation of what is dearest to man—his property, and the order and ideas to which he has been trained. The debt will soon add another tie to bind still closer the Government and the people. Being issued in sums of \$5, and upward, it will soon be distributed as widely as property itself, so that nearly every voter, which with us means every citizen, will see in the maintenance of the Government, the preservation of the means upon which he depends, in part or whole, for support.

These securities will be regarded all the more valuable from provisions that are cer-

tain to be made for their ultimate payment, in accordance with the universal practice of the States, as well as the nation. The public debts of all have, almost without exception, been treated as commercial transactions, to be paid off at an early day. We shall, in the present instance, be true to precedent and tradition. Government has reserved to itself the right to pay off all the debts contracted, or authorized to be contracted within a period of five years, with the exception of some \$70,000,000 of 20 years' bonds. The object of this was two-fold—not to burden itself with a debt running through a long course of years; or, in case it became necessary to borrow on time, to wait till the credit of Government was fully restored, when it would be enabled to make loans at the rates of interest which, for nearly twenty years past, its securities have yielded the purchaser, and which have not exceeded 4½ per cent.

Such we are confident it will be enabled to do, even before its 7 3 10 per cents fall due. We are to have no more long bonds, bearing a high rate of interest unless sold at par. With the progress of our arms, those issued of this class must advance to the figures the 6 per cents so long held, and serve as standards of price for other securities. The small amount issued, and the certainty that no more will be issued yielding so high a rate of interest, are important elements in the value of those outstanding, and must cause their steady, if not rapid, appreciation.

Another important element in the value of the public securities is the rapid progress of the country in population and wealth. The ratio of increase of the former from 1850 to 1860 was 36.5 per cent.; the total increase being 8,300,000. The ratio of increase of the value of property of the country was considerably more than 100 per cent.; the aggregate for 1850 being \$7,066,562,966; for 1860 \$16,102,524,116. There will be slight check to the progress of population, though not a permanent one. In the Northern States the conditions favorable to a rapid increase—abundant food, remunerative prices for labor, and cheap, fertile lands, were never more perfect and complete. Their wealth will probably increase faster in the next ten than it has in the last ten years. The agencies to which the marvelous increase for the last ten are due—steam as applied to production and locomotion—have only just begun to be put in motion, to convert our natural wealth into forms fitting for use.

In the North, the demon of discord has not shown its head, and industry pursues its objects with the same confidence and success that it did before secession was dreamed of. The strength that the North has displayed showed that secession took off only a very small fraction of that of the whole country. But the burdens that we can bear to-day will become light to-morrow, enabling us, as on two former occasions, to commence, after a brief pause, the rapid retirement of our liabilities. At the close of the war it is not probable that we shall have a larger debt, in ratio to our population, than we had at the formation of our Government, while the means of our people, compared with their numbers, are certainly five-fold greater, and are increasing in vastly greater ratio than this."

THE RESOURCES OF CANADA.

Of the numerous colonial possessions of the British Crown, none has been more frequently under public discussion of late than Canada, and yet, perhaps, there is no colony so little known and appreciated by the general public.

The large amount of British capital sunk in unremunerative investments in the Province; the oppressive tariff on British manufactures; the cost to the mother country for military expenditure in Canada; the explorations in the North west Territory; the Parliamentary discussions on the Galway contract steamers, and the effects of the war in the United States, have all served to direct public attention very prominently towards Canada; and hence a few remarks on the resources of the colony may serve to remove mistaken impressions, and cause it to be better understood by those who have not had opportunity to examine in detail its position and progress.

Independently of its north-western possessions not yet open for settlement, the Province of Canada embraces about 350,000 square miles of territory, and is thus nearly three times as large as Prussia or the United Kingdom, and one-third larger than France.

In 1840, the two provinces of Upper, and Lower Canada, which had hitherto possessed separate legislative bodies, were united, and the Constitution granted in 1841 conceded self government and all the privileges which that involves; among others, freedom of commerce. Under the influence of this legislation, even with adverse circumstances of financial crises and political feuds, Canada has made immense progress, without Europe seeming to be aware of it.

In 1851, the population of Western Canada was 952,004 souls, and of Eastern or Lower Canada 890,261,—making a total of 1,842,265. In 1861, the population of Western Canada was 1,395,222 souls, and of Eastern Canada 1,106,148, or a total of 2,501,270,—a decennial increase of 659,105.

As might be anticipated, the population of the Western division has increased most largely; for in 1851, the excess of population in Western Canada, the British quarter, was but 61,743 persons; while in 1861 there was an excess of 289,074 persons over the Eastern district, or French quarter. The disturbed condition of the American States, the cheapness and facility of access to Canada by steam and rail, the free grants of land offered to settlers, and the demand for agricultural produce, have greatly increased the tide of emigration to Canada. About a quarter of a million persons have left the United Kingdom for the British North American provinces (chiefly to Canada) in the last eleven years.

The Great Lakes and the River St. Lawrence form the natural outlet to the ocean for the countries situated on their waters, and afford great advantages for commercial communication with distant countries. The surplus waters of the Lakes are tributary to the St. Lawrence.

The canals of Canada overcome a total difference of height, from Lake Erie to the sea, of 564 feet.

The long channel of communication by river, canals, and lakes, of 1,500 to 2,000 miles, is practicable to sailing ships and steamboats of 300 to 400 tons.

In 1851, Mr. Andrews, in his official report to the United States Government, estimated the value of the commerce of the Great Lakes to be about 80,000,000. In the last

ten years, there can be little doubt that this commerce has more than doubled. The amazing progress of this Lake commerce is an index to the strides of the Great West in productive resources. The American tonnage employed on the Lakes in 1845 was 94,100 tons, valued at 1,250,000; and in 1855 250,000 tons, valued at 2,500,000. The growth of Canadian tonnage on the Lakes has been quite as rapid as the American. In 1856, a Toronto paper gave a list of Canadian vessels on the Lakes, numbering 239, measuring 42,536 tons, and the cost of which had been about 500,000. This list did not include, however, many small craft, and there is no law compelling registration: hence the estimate is necessarily imperfect. The present lake tonnage may be taken to be 400,000 tons, of which two-thirds is American.

The amount of a nation's exports and imports is an excellent criterion by which to judge of the extent of its business and the greatness of its wealth. Measuring the prosperity and progress of Canada by this test, we find that in 1834 the sum total of her exports and imports amounted to but 2,082,567; in 1851 they reached 7,049,081; and in 1866, 15,126,300. The year 1860 will be noted as an epoch in Canadian history, as being the first year in which the colonial exports exceeded the imports. The figures of the external trade in that year were—Value of imports, 6,888,324; of exports, 6,926,360. Total, 13,814,694.

In 1849, the value of the trade between Canada and the United States was as follows:

Exports to.....	\$1,581,092
Imports from.....	4,243,724

Total.....\$5,724,816

In 1859 it had increased to—

Exports to.....	\$13,022,314
Imports from.....	17,592,916

Total.....\$31,515,230

In 1860, the total trade with the Union was to the value of \$37,971,427.

The free-trade policy of Sir Robert Peel was viewed with alarm by the people of Canada on its initiation: and although injurious to many interests in its first effects, instead of resulting in permanent evil, it has proved of immense benefit to Canada. Since 1847, the trade of the province has increased in a very satisfactory manner. With their American neighbors it will be seen the Canadians now carry on a trade of the value of £7,594,300.

Several important steps have of late years been taken towards greater freedom of trade. Among these are the establishment of a free port, with a district attached to it, on the Gulf of St. Lawrence and at the Sault Ste. Marie; the opening of the whole line of canal, free of all but nominal toll, to vessels, whether American or British, proceeding to a Canadian port or proceeding out to sea by the St. Lawrence; and the reduction of the duties on wines, spirits, and dried fruits. It is to be hoped that economy in the expenditure, and a better management of the revenue assessments of the province, will enable the oppressive existing tariff on British manufactures to be modified.

Upon the union of the two provinces, in 1841, upwards of £1,500,000 sterling was voted in the first session for the St. Lawrence and Welland and the Burlington and Chateaufort canals, for harbors upon the Lakes, and other internal improvements. The whole expenditure upon the public works connected with canals, rivers, lighthouses, roads, &c., has exceeded £5,500,000 sterling. There are upwards of

The Canal Tolls of the State of New York

were:

Total receipts for May, 1862.....	\$743,811 25
Total receipts for May, 1861.....	542,803 39

Increase.....\$201,007 86

3,000 miles of railway now completed or in progress; the total cost of construction of these, including the Victoria Bridge across the St. Lawrence, will amount to not less than £14,000,000.

Whatever may be the future value of Canadian railways as investments to shareholders, the advantages they impart to the sections of the country they serve cannot be questioned. The main through lines will be the channel of communication for the continued growth of the great West, while the local and branch lines will be the means of peopling the forests through which they pass and giving that value to the timber and soil which the mere fact of their having become accessible instantly imparts to them. There are now nearly 2,000 miles of railway in operation in Canada, exclusive of the Grand Trunk extension to Portland, (164 miles) which though on American soil, yet having been constructed to secure an ocean port in winter, is really a Canadian road. The province has subsidised a weekly line of ocean steamers of its own, which perform the mail service with great regularity. The province pays to the Canadian Mail Packet Company £45,000 per annum.

Postal communication throughout the province is very complete. The most distant hamlet has its post office, and the number of post offices in Canada is now 1,720. The expenditure, beyond receipts on post-office service, is about £60,000 per annum. The electric telegraph passes through every village in the colony, and the number of miles in operation is at present 4,200. The approach or arrival of a steamer or sailing vessel at Quebec is known very nearly at the same moment in every town of the province.

The total tonnage, inwards and outwards, in 1856, was 12,250,000 tons, of which, in round numbers, 6,300,000 ton were Canadian steamers, and 4,760,000 American steamers; 830,000 tons Canadian sailing vessels, and 346,001 tons American sailing vessels. In 1860, 29,502 vessels, of 3,030,730 tons, passed through the provincial canals.

The natural resources of the country are unbonded, and they are provided, like all the gifts of Providence, with a distinct reference to each other which makes them doubly valuable. Water-power, that mighty engine of industry, is everywhere abundant, and just where it is required—in the midst of magnificent forests of valuable timber, for which an inexhaustible market is springing up in the prairie regions in the Far West of America and in Europe.

The value of all the vegetable productions of Canada in 1851 was estimated at £9,250,000, of which grain and flour constituted nearly two thirds. At the present time this value has probably been doubled, for the exports alone of vegetable products are about £6,000,000 in value.

The agricultural produce of Canada consists chiefly of cereals and fodder, and the raising of live stock could consequently be carried on on a very large scale. In 1859, the exports included 2,635,000 bushels of oats, 1,766,000 of barley and rye, 690,863 of peas, nearly 2,000,000 bushels of wheat, 427,007 barrels of wheat flour and meal, and other articles the produce of the soil, to the aggregate value of £1,468,000.

In 1820, the total assessable property of Western Canada was estimated at £2,500,000; in 1854 it amounted to £50,000,000, exclusive of the value of public lands, public timber, and minerals. Nothing, however, tends more to illustrate the rapid growth of Western

Canada than the difference between its exports of wheat at different periods.

In 1828, the quantity of wheat exported from Canada West amounted to only 296,620 bushels; in 1852 it reached 5,500,000 bushels.

In 1850, the number of bushels of wheat produced in Western Canada was 12,675,603, an average yield of 16½ bushels per acre—nearly as much as was grown in Ohio, the most fertile and productive of the American States, and an average yield of one-third more per acre. In 1856, the gross wheat production of all Canada was 25,556,000 bushels.

According to the official statement of the Agricultural Bureau of Canada, the average yield of wheat in some townships exceeds 22 bushels per acre, and where an approach to good farming prevails, the yield rises to 30 and often 40 bushels to the acre. On new land, 50 bushels is not very uncommon.

The products of the forests in Canada are second only to those of agriculture in importance; and including the ships built and sold, are nearly equal in value.

Amongst the monarchs of the forest may be found the white and red pine, the former of which is frequently met with 100 feet high to the first branch, and will occasionally reach 200 feet in height. The average size of the timber cut for the Quebec market will be in logs of about 20 inches square and 60 feet in length; white oak will cut to about 18 inches square and about 50 feet in length, although sticks of both timbers are occasionally cut considerably larger.

The quantity of the timber exported is as follows:—25,000 to 30,000 tons of elm; 35,000 to 40,000 tons of oak; about 400,000 tons of white pine, and 50,000 or 60,000 tons of red pine; about 1,000 sticks of timber suited for masts; about 3,000 M standard staves, and 5,500 M other staves; 50,000 standard hundred of deals; and 350,000 M feet of planks and boards.

In the process of clearing the woodlands for settlement, the ashes obtained from burning the trees felled often goes a long way towards enabling the settler to meet the first cost of his land. Thus, in 1859, there were exported from Canada 25,598 barrels of potash, and 12,221 barrels of pearlash of the aggregate value of £221,000. Our direct imports of these wood ashes from Canada in five years ending with 1860, averaged 115,000 cwt., which may be valued at £180,000.

By the census of 1851, it appears that there were in the colony—horses, 385,377; sheep 1,597,849; horned stock 741,106. Canadian horses are celebrated for their hardiness and useful paces, and especially as trotters.

Exclusive of the home consumption, the value of the butter, pork, wool, hides, &c., exported exceeds £300,000 per annum.

The value of the fish production in 1860 was stated at £300,000.

On a coast line of 100 miles in Lower Canada, the cod, herring, mackerel, salmon, and other fisheries are carried on successfully. There are about 70 salmon-fishing rivers in Lower Canada, which the Government are now fostering, with a view to enhance the commerce in this valuable fish. From the Bay of Chaleur about 10,000 barrels used to be exported.

Passing now to mineral products, we may state that no man has done more than Sir W. E. Logan to develop the subterranean treasures of Canada, which are scarcely yet fully appreciated in proper quarters. The large masses of magnetic and specular iron ore,

and of the rare silicate of iron, the blocks of limestone and marble and other minerals and building stones shown at Paris, and those which will be exhibited in London in May, will serve to convey a fair impression of the economic value of the mineral resources of the province. The northwest extending from the Georgian Bay to the western portion of Lake Superior, presenting a range of coast of about 1,000 miles, which is washed by the waves of the largest lakes in the world, is rich in copper ores—rich to an extent which cannot be yet estimated, simply because it has not yet been explored. It is in no sense inferior to the American side of the Lakes in this respect, so far as slight examinations have proved.

The mineral oil-springs of Western Canada, which now furnish in abundance an important article of commerce, have developed a new source of wealth.

The following statement gives the gross value in dollars of articles of Canadian Produce and Manufactures exported in:

	1855	1860
Produce of the Mines.....	\$125,535	\$555,316
" Fisheries.....	459,920	832,646
" Forests.....	7,911,933	11,042,253
Animals and their products.....	1,953,384	4,421,257
Agricultural products.....	13,650,400	14,259,225
Manufactures.....	496,077	502,037
Other articles, and Ships built at Quebec.....	1,248,107	1,475,736
Estimated short returned.....	3,465,014	2,570,430
	\$24,148,469	\$34,631,599
	\$5,627,692	\$6,926,378

The value of the direct exports of British products to Canada now averages £3,250,000 sterling, whilst the computed value of the imports from Canada is over £4,000,000.

The average import trade of Canada in the five years ending with 1859 was £8,807,000, and its export £5,936,000. The territory of which Canada is the centre extends over an area equal to mere than one tenth part of the globe. Its resources as our rough glance will have shown, even when every allowance has been made for the sterile and desert districts of the north and west, may be said, without any figure of speech, to be exhaustless.—*London Exchange.*

PENNSYLVANIA RAILWAY DECISION.

Judge Sharswood has given the following opinion in the Philadelphia District Court, in a case between two holders of Broad Top Mountain Railway Bonds; in which it is concluded that, Bonds of the Huntington and Broad Top Mountain Railroad Company are negotiable, and title passes by delivery. A *bona fide* purchaser without notice of bonds, which were stolen, has a good title to them against the former owner.

The case presented on this bill, answer and proofs, may be briefly stated. The complainant was the owner of certain bonds of the Huntington and Broad Top Mountain Railroad Company, payable to bearer, with coupons for interest attached. They were stolen from the possession of his attorney, and afterwards sold at the Board of brokers, and purchased by the defendant at the market rate. It is not pretended that the defendant is not a *bona fide* purchaser for value, in the usual course of business, and without notice. The bill prays that defendant may be decreed to deliver up the said bonds and coupons to the complainant.

It does not appear to be a question but that as against the company which issued these bonds in this form, they are strictly negoti-

able. They purport to be an agreement on their part to pay them to the holder, and their evident design was that they should be negotiable; thus possessing an additional value from that character. They meant them to pass from hand to hand, and are estopped from setting up any equity which they might have against the party to whom they were originally issued. But the cases both in England and this country go further, and hold that not only as against the company originally issuing them, but as against any intermediate owner who may have lost or been defrauded of them, the *bona fide* holder has a perfect title. Thus, in the *Morris Canal and Banking Company vs. Fisher*, 1 Stockton, N.J. Rep. 667, it is said that "even as between third parties, we suppose the common usage to transfer by delivery, without inquiry as to the title of the transferee, would justify us in holding these securities to differ from common obligations in being so far negotiable that the *bona fide* possessor shall be held to have a good title." And in *De lafield vs. State of Illinois*, 2 Hill, 159, "the bonds are negotiable instruments, the title to which will pass by mere delivery, and though void in the hands of the appellant, (the party to whom issued) they will be valid securities in the hands of a *bona fide* holder;" *Morris Canal and Banking Company vs. Lewis*, 6 American Law Reg. 428; *Stoney vs. The American Life Insurance Company*, 11 Paige, 635. Such is the settled law of England; *Gorgier vs. Melville*, 3 B. & C. 45. Such bond was there held to be in its nature precisely analogous to a bank note payable to bearer, or to a bill of exchange indorsed in blank. Being an instrument, therefore, of the same description, it must be subject to the same rule of law that whoever is the holder of it has power to give title to any person honestly acquiring it.

It is supposed that the case of *Diamond vs. Lawrence Co.* 1 Wright 353, establishes a different rule of law in Pennsylvania. But the decision there is placed upon peculiar grounds—that the bonds were those of a municipal corporation, issued under the authority of an Act of Assembly, of the terms of which the buyer was bound to take notice, and inquire whether they had been issued in conformity to its provisions.

The seal, it is said, prevents their ever being negotiable. At common law no chose in action was assignable. The commercial law and statute of Anne excepted from this, bills of exchange foreign and domestic, and promissory notes. But as to all other choses in action, under seal or not, the assignment was in equity a mere declaration of trust, the legal title was still in the original party, and the suit at law must be in his name. A court of chancery controlled it for the benefit of the assignee or *cestui que trust*, and even courts of law soon came to recognize the latter as the true plaintiff, and to protect his rights. While things were in this position it followed from established equitable principles, that the debtor, having a legal defence, and equal equity with the assignee, stood on higher and better grounds than the latter. As soon, however, as it is settled that the legal title passes by the assignment to the assignee, then the condition of the parties is changed. The assignee has the law and equal equity with the debtor, and ought to prevail. All that the defendant can then do is to attack the equity of the assignee, and show that he is not a *bona fide* holder for value, and without notice. It may be asked, then, why does not the legal assignee of a common money-bond, assigned agreeably to the provisions of the Act of May

28th, 1715, have the same advantage? The answer is, because that Act says that he shall not. His right is expressly confined to the recovery of so much "as shall appear to be due at the time of such assignment, in like manner as the person or persons to whom the same was or were made payable, might or could have done." As the Act of 1715 included in its terms "notes in writing," as well as bonds and specialties, the Supreme Court decided in *McCullough vs. Houston*, 1 Dall. 441, that the indorsee of a promissory note took it subject to all equitable considerations to which it was subject in the hands of the original payee. This led to some legislation, providing that the principle should not apply to notes dated in Philadelphia, and expressed upon their face to be without defalcation, nor to notes discounted by banks or placed in those institutions for collection. When after having stood unquestioned, though regretted, for forty nine years, *McCullough vs. Houston* was overruled by the Supreme Court in *Bullock vs. Wilcox*, 7 Watts, 328, it was put expressly on the ground that the assignability of promissory notes did not depend upon the Act of 1715. As soon as the indorsee was recognized as the legal assignee or holder, unclogged with the restriction of the statute, it followed that his title was superior to any equities of his debtor, of which he had no notice prior to parting with the value he had given for the note.

When, therefore, the Supreme Court decided, as they did in *Carr vs. Le Fevre*, 3 Casey, 413, that the holder of such bonds as those in question, has the legal title in him, and can sue in his own name, without any reference to the Act of 1715, and independently of its provisions, they decided a principle which, in its logical results, rules the question now before us. The defendant in this bill has the legal title, and having purchased these bonds *bona fide* for value, without any notice or knowledge that they had been lost or stolen, his equity is equal to that of the complainant. When the equities are equal, the law must prevail. Bill dismissed with costs.

THE GASWORKS OF LONDON.

(Continued from page 165.)

Mr. Hills' prepared oxide, containing also a little sawdust, is in general use among the London gas companies, although the Chartered Company employ a natural bog iron ore from Sligo and Donegal, while the Surrey Consumers' have used cast iron borings well rusted, and mixed with copperas (sulphate of iron) and sawdust. The purifying material, in all cases reduced to a coarse granular powder, is placed, generally in layers, inside a succession of gas tight vessels known as the purifiers, the gas entering at the bottom of one purifier, rising through the porous mass of purifying material, and escaping through one side of the vessel near the top, and passing thence to another. In some works the oxide is placed in a single layer, 3 ft. or 4 ft. in depth, but it is more commonly divided into three or four layers, from 12 in. to 18 in. each in depth. An additional thin layer of dry slaked lime is often added to take up whatever carbonic acid may be present in the gas.

The purifying vessels are of cast iron, of a size corresponding to the quantity of gas to be dealt with. At the Commercial Gasworks, where the greatest production of gas is not far from 2,500,000 cubic ft. per day, there are four purifiers, each 24 ft. square and 6 ft. deep, the oxide being placed in three layers each about

18 in. deep. A square purifier is not perhaps the most convenient for emptying, inasmuch as the men have to shovel to a greater distance from the centre than if a rectangular form were adopted. The largest purifiers we have seen are at the Imperial Company's works at Fulham, their size being 20 ft. by 36 ft., but the oxide is placed in very shallow layers, and has to be charged very often. The Commercial Company are about erecting two purifiers, each 18 ft. by 30 ft. It is sometimes the practice to work the gas successively through three purifiers, the remaining one out of the set of four being laid off for changing the oxide, or any casual repairs. The distribution of gas among the several purifiers in a set is managed with ease by means of valves in pipes communicating with each vessel. The lid of the purifier is always made of plate iron, with a flange depending at the edge and entering a water cup extending around the cast iron sides of the purifier itself. This makes a water joint, and at the same time permits of the lid being raised to get at the oxide whenever it requires changing. In some cases, as with the great purifiers at Fulham, the lids require to be counterweighed, and, in all cases, means are required for hoisting the lids clear of the purifiers. A stout framing is sometimes erected around and over them, so as to give a point of attachment for the falling tackle. Where a set of purifiers are placed in a continuous row, a railway is formed of a gauge sufficient to include the whole width of the range, and a travelling platform provided with hoisting gear is mounted upon the rails. Before a lid can be lifted, and after the gas has been shut off from the entering main, it is necessary to open a man hole or other opening in the lid, so as to admit the air to the purifier, as, otherwise, the suction in raising a surface of from 300 to 700 square feet, against an unbalanced atmospheric resistance equal to a pressure of even 5 in. of water, would be from 5½ tons to 8½ tons.

The layers of oxide, previously moistened, are supported on gratings or "sieves," as they are called, which were originally made of cast iron, and are made so yet, at the Horseferry road and the Goswell street (Brick lane) stations of the Chartered Gas Company. The sulphur precipitated in the oxide acts so powerfully, however, upon the cast iron grates as to eat them away in a short time, often in less than two months. For this reason wooden sieves are now used in nearly all the gasworks of London, or in all with the exception of the two just noted, and in the Phoenix Company's works, where only lime is employed in purifying. At the Chartered Company's works, however, we learn that the wooden sieves become hot, and were warped and charred in the purifiers, so that iron sieves are still employed, notwithstanding their rapid corrosion by sulphur.

The length of time during which the oxide, in a succession of purifiers, retains its desulphurising virtue depends on the relative quantities of the oxide and gas brought together, as well as on the degree of impurity in the gas and upon the original quality of the oxide itself. It is common to pass the gas through two purifiers, and when the oxide first acted upon becomes converted into a sulphuret, to turn the gas into the second and third purifier, the first, in the meantime, being laid off to be opened. The second and third are then worked together until the oxide in the second becomes inert, when the third and fourth are placed in communication, the next change being to connect the fourth and first, passing the gas from the former to the latter, and so

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	R. to Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	65	48	\$	\$										
Baltimore and Ohio.....	Md.		380	13,111,800	10,781,833	566,070	3,922,203	2,303,788	Sept. 30, 1860	Maryland Sterling.	3,000,000	5			
do do										Mortgage.....	2,700,000	6	87	1885	
do do										"	700,000	6	90	1880	
do do										"	1,124,500	6	92	1875	
do Washington Branch.....	Md.		30	1,650,000						"	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind.	118	118	1,859,813	1,256,750	139,129	314,000	8,795	Dec. 1860.	1st Mortgage	791,000	7	55	1866	
do do										2d "	160,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	122	68	1,950,950	1,049,000	27,545	911,019	492,017	June 30, 1860						
Burlington and Missouri.....	Mo.		75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	132	96	3,98,400	8,880,000		1,997,065	733,950	Dec. 31, 1860	1st Mortgage.....	3,700,000	6	100	1864	
Central Ohio.....	Ohio.		137	In hands of Receiver.	3,073,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7	62	1861	
do do										1st "	800,000	7		1864	
do do										2d "	800,000	7		1865	
do do										3d " S. F.	950,000	7		1865	
do do										4th " S. F.	1,365,000	7		1876	
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	105	1865 & 1870	
do do										2d "	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.		222	In hands of Receiver.	6,169,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d "	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						3d "	1,000,000	7			
do do										1st Mortgage.....	400,000	7			
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		104	2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S.F.	1,250,000	7	80	Feb. & Aug. 1.	
do do										Gen'l 1st Mortgage.	3,600,000	7	52	Feb. & Aug. 1.	
do do										2d "	2,000,000	6	24	May 1.	
Chicago and Rock Island.....	Ills.	53	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	103	1870	
Chicago, Burlington and Quincy.....	"	76	138	4,629,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	105	1863	
do do										" 2d " S. F.	813,000	8		1890	
do do										1st Mor. Chi. & Aur.	393,000	7		1867	
do do										2d "	303,000	7		1869	
do do										1st " Cent. Mil. Tract	390,000	7		1864	
do do										2d "	245,000	8		1868	
Chicago, Iowa and Nebraska.....	Ind.		82	No report											
Cincinnati and Chicago Air Line.....	Ohio.		60	2,155,800	1,356,000		644,228	174,593	Mar. 31, 1861	1st Mortgage.....	441,000	7	101	1867	
do do										2d "	950,000	7	90	1880	
Cincinnati, Wilmington & Zanesville ..	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000	7			
do do										2d "	532,000	7			
do do										3d "	104,000	7			
do do										Income.....	365,509	7			
Cleveland and Mahoning	Ohio.	68	175	1,167,473	1,712,000	229,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d "	490,000	7			
do do										3d "	341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	21	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	73	1860	
do do										2d " M. L. or 1st Ex.	1,180,000	7	61	1873	
do do										3d 2d Ex.	1,165,000	7		1865	
do do										4th 3d Ex.	1,150,000	7	65		
Cleveland and Toledo.....	Ohio.	45	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	359,000	7	65	1867	
do do										1st " " 2d Div.	263,000	7	65	1872	
do do										2d "	265,000	7		1862	
do do										1st " Tol. Nor. & Clev	521,000	7	75	1863	
do do										2d "	293,300	7	75	1861	
do do										Junction Income..	44,509	7		1862	
do do										C. & T. Income..	300,000	7		1864	
Cleveland, Columbus and Cincinnati ..	Ohio.	116	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	510,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula ..	"	125	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	99	1861	
do do										2d "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	87	54	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700	92		1860 to 1866	
Columbus, Piqua and Indiana.....	"	103	142	In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"									2d "	2,212,000	8			
Dayton and Western.....	Ohio.	38	38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	8	50	1875	
Detroit and Milwaukee.....	Mich.	186	186	No report						2d "	2,500,000	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111	111	No report											
Dubuque, Marion and Western.....	"	51	51	No report											
Eaton and Hamilton.....	Ohio.	36	36	469,762	728,853	152,694	152,322	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132	132	966,061	1,219,100	249,688	124,110								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
Galena and Chicago Union.....	Ills.	70	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	2d "	18,000		102	1862 & 1863	
do do										1st Mortgage.....	1,993,000		100	May 1, 1875	
do do										2d "	1,920,000				
Great Western	Ills.		175	1,000,000	2,391,000		45,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	84	84	400,000	No report										
Greenville and Miami.....	Ohio.	32	32	300,000	473,000	75,000	63,141	13,573		Land Mortgage...	5,000,000		47		
Hannibal and St. Joseph.....	Mo.	206	206	1,041,026	10,554,000	220,306	996,907	512,035	Sept. 1, 1860.	Mortgage Conv.....	1,344,000				
do do										1st Mortgage.....	927,000				
Hartford and New Haven.....	Conn.	62	62	2,350,000	927,000	13,356	712,876	354,135	Aug. 31, 1861	1st Mortgage.....	4,000,000	6	30	1873	
Hudson River.....	N. Y.	47	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	2,000,000	7	10	1869 & 1870	
do do										2d "	2,000,000	7		1880	
do do										3d "	1,840,000	7		1875	
Illinois Central.....	Ills.	63	455	15,654,920	15,672,240		2,778,333	1,138,640	Jan. 1, 1860.	Optional.....	28,000	7		1868	
do do										Construction.....	12,885,400	7		1875	
do do										"	4,115,000	6	93	1875	
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	Debentures.....	42,740				
do do										1st Mortgage.....	600,000				
do do										2d "	578,000	10			
Indianapolis and Cincinnati.....	Ind.	110	110	1,689,900	1,362,284	140,659	418,859	230,834		Income.....	38,700	1			
do do										1st Mortgage.....	500,000	7	85	1866	
do do										2d "	400,000	7			
Indianapolis, Pittsburgh and Cleveland ..	Ohio.		84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort.....	200,000	7			
do do										1st Mortgage.....	649,944	7			
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d "	314,000				
Iron.....	Ohio.	13	13	118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st	29,000	7	75	1861	
do										2d	392,000	7	70	1873	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st	260,000	7			
do										2d " Conv.....	1,000,000	7			
do										3d	600,000	7			
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	90,000		89		
do										2d " E. D.	1,000,000		20		
do										1st Land Grant W D	4,000,000				
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report		June 30, 1861	1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.	29		514,433	130,000		105,944	43,267	Jan. 1, 1862	1st Mortgage.....	1,300,000	6		1863	
Little Miami.....	Ohio.	65					1,330,070	529,981	June 30, 1861	City Loan.....	174,000				
Louisville and Frankfort.....	Ky.	65		1,169.50	394,519		245,910	98,679		1st Mortgage.....	248,000	7			
do										1st Mortgage.....	2,000,000				
Louisville and Nashville.....	Ky.	208		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.	288		2,500,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.	87		1,648,050	1,245,300	87,969	230,303	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.	203		8,561,213	190,438	108,150	43,649	78,800	Aug. 1, 1861	1st Mortgage Conv.....	2,500,000	7		1868	
do										2d	2,000,000	7			
do										3d	1,500,000	7			
do										Sterling Income.....	333,000	4			
Michigan Central.....	Mich.	4½ 284		6,037,724	7,908,429	125,000	2,126,699	910,169	May 31, 1861	Domestic	928,617	6	98½	1872	
do										1st Mortgage Sterling.....	467,483	8	84	1869	
do										1st " Conv.....	500,000	8	90	1860	
do										1st " unconv.....	250,000	8	104	1869	
do										1st " Dollar Conv.....	2,598,000	8	105½	1882	
do										1st " S. F. Conv.....	4,153,000	8	99	1860	
Michigan South'n & North'n Indiana	Mich &	6½ 246		9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861	Mort. Mich. S.	991,000	10½	98	1861	
do										" Nor. Ind.	985,000	100½	98	1865	
do										" Goshen Line.....	1,168,000	81		1877	
do										S. F. Toledo	2,850,000				
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		2d Mortgage.....	2,465,000	8			
do										1st Mortgage.....	400,000	8			
do										2d	20,000	7			
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8			
do										2d	600,000	8			
Milwaukee and Prairie du Chien.....	Wis.	27½ 192		4,944,000	2,556,000		583,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	90	1891	
do															
Milwaukee and Western.....	Wis.	71		No report											
Mississippi and Missouri.....	Iowa,	55		No report											
do										1st Mortgage Conv.....	1,000,000	7			
do										2d " S. F.	400,000	8			
do										Oskaloosa Div.	1,425,000	7			
New Jersey.....	N. J.	13 34		4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Land Grant.....	7,000,000	7			
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,386	Dec. 31, 1860	Mortgage.....	711,000	102½			
New York and Erie Pref.....	N. Y.	6½ 3½		Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860	1st Mortgage.....	3,000,000	105½			
do										2d	4,000,000	10			
do										3d	6,000,000	97			
do										4th	4,900,000	98½			
do										5th	1,792,500	88½			
New York and Harlem Pref.....	Conn.	34½ 138		5,717,190	6,055,752	.....	1,142,851	433,716	Sept. 30, 1860.	1st Mortgage.....	2,950,000	7	102½	1873	
do										2d	1,000,000	7	104	1864	
New York and New Haven.....	Conn.	11		3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7	94	Dec 1, 1866	
do											978,000	6		Oct 1, 1875	
New York Central.....	N. Y.	91½ 556		24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,923,000	6	100	June 1, 1883	
do										Mortgage.....	3,000,000	6	105	June 15, 1864	
North Central.....	Mo.	138		2,260,000	5,890,300	537,926	1,012,103	283,627	Dec. 31, 1860.	Construction.....	2,066,500	6		1885	
North Missouri.....	Mo.	242½ 736		4,350,000		93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6			
Ohio and Mississippi, Eastern Div.....	Ohio & Ind	192		Leased	9,880,000	2,330,030	898,217	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6			
do										3d	316,995				
do										Construction.....	4,637,920				
do										Income.....	3,591,185				
Ohio and Mississippi, Western Div....	Ills.	148		.....	3,292,403		No report								
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000	6			
do										" S. W.	2,800,000	6			
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	Construction.....	4,500,000	6	104	1889	
do										1st Mortgage Conv.....	4,905,000	6	98½	1875	
do										2d	2,319,000	6			
do										2d " Sterling.....	1,937,440	5	89		
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report			State Works.....	7,200,000	5			
Philadelphia, W. & Baltimore.....	Del.	98		5,600,000	2,310,000		1,236,597	471,712	Oct. 31, 1860.						
do										1st Mortgage.....	2,300,000	6	99½	1884	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	Improvement.....	119,000	6		1863	
do										1st Mort. O. & P.	1,000,000	7		1865	
do										2d " " "	750,000	7		1866	
do										1st " O. & I.	1,000,000	7		1872	
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,293,700	67,869	80,533	29,690	Oct. 31, 1860.	2d " " "	380,000	7		1873	
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,065,328	220,850	68,438	May 10, 1861.	Pittsburgh Subs'n.....	500,000				
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,690	2,683,381	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1876	
do										"	997,000	7		1866	
do										"	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,924	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886	
do															
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000				
do										2d	450,000				
Stuebenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d	900,000	7		1865	
Terre Haute, Alton and St. Louis....	Ills.	208		No report						1st Mortgage Conv.....	1,000,000	7	103	1862	
do										2d " Conv.....	2,000,000	7	85	1868 & 1876	
do										1st " Bel. & Ill.	517,000	7		1873	
Terre Haute and Richmond.....	Ind.	100 73		1,281,450	230,000	none.	377,682	216,183	Dec. 1, 1861.	1st Mortgage.....	200,000	7		1866	
Toledo, Wabash and Western.....	Ohio & Ind	5½ 243		2,123,500	5,996,049	52,389	231,546			1st Mortgage.....	3,400,000	7		Aug. 1, 1865	
do										2d	2,500,000	7		Nov. 1, 1875	
do										Mort. Coupons.....	22,040	7		1860 to 1865	

on. At the Goswell street station of the Chartered Company, when natural bog iron ore from Sligo is used for purifying, it is broken up and mixed with a little quick lime to take up the moisture which it contains, and also to attract whatever carbonic acid may be present. The oxide is then placed in four layers of 9 in. each in each purifier. The latter, we should suppose, are not far from 15 ft. by 20 ft. each, although we are unable to give their exact size. With this quantity from 6,000,000 to 8,000,000 cubic feet of gas are passed through two purifiers at each charge of oxide, equal to three or four days' produce of the establishment. That is, from 3,000,000 to 4,000,000 cubic feet of gas will be passed through say the first and second purifiers, and afterwards the same quantity through the second and third, the second purifier requiring to be charged afresh at the end of the passage of 6,000,000 or 8,000,000 feet of gas through it, and the others successively in the same manner. Of course there is no such thing as a fixed proportion between the oxide used and the gas purified; the engineer is guided wholly by the test for sulphuretted hydrogen, which is that of holding, for a few seconds in a stream of the gas, a paper previously dipped in a solution of acetate of lead, or, still better, in a solution of nitrate of silver. If any sulphuretted hydrogen be present in the gas, the paper will be blackened by the precipitation of metallic lead or silver. Whenever the gas flows foul the purifiers had better be charged afresh as quickly as possible. For ammonia, the test is turmeric paper, which, if the impurity in question be present, will be changed, on its exposure to the gas, from its proper yellow color to a deep red or brown.

When the spent purifying material, converted from an oxide to a sulphuret of iron, is taken from the purifiers, it is spread in layers on the ground, or on boards, either in the open air or under shade, and thus exposed to the action of the atmosphere. The black, tarry appearance which characterizes the sulphuret gradually changes to a brown, and, finally, to the rusty red peculiar to the original oxide, the material being in the meantime occasionally turned over with a shovel. The precipitation of sulphur and the resumption of oxygen are occasionally so rapid, especially when the material has been used but a few times, that it smoulders, and even enters upon active inflammation. In the latter case the sulphurous vapor is almost overpowering. At the Horseferry road station of the Chartered Company, the spent material is revived upon an extensive grand flooring, down through which a current of air is maintained by the powerful draught of one of the chimneys, 132 ft. high, on the works. After being employed a number of times, the accumulation of free sulphur, in mixture with the oxide, is such that if a small quantity of the whole be mixed with chlorate of potash and struck upon an anvil, it will explode with great violence. The accumulation is represented, indeed, as already stated, by an increase of from thirty to forty per cent. upon the original weight of the oxide.

When saturated with sulphur the oxide is sent to Mr. Hills, the patentee, who finds some good use for it, and by which it partly pays for the fresh material returned in its stead.

The labor required for emptying and charging the purifiers every few days is costly enough to have induced some gas engineers to attempt the revivification of their purifying material in the purifiers themselves. This is accomplished by shutting off the gas from the inlet main, raising the lid, and then drawing

air downwards through the layers of deoxidized and sulphuretted material by means of an exhaustor in communication with a pipe at the bottom of the purifier. At the Surrey Consumers' works, where Mr. Croll's heavy mixture of iron borings, copperas, and sawdust is used, and which seldom, if ever, catches fire, this plan is found to answer very well. But at the South Metropolitan works, where Mr. Livesey has tried it with Hills' oxide, there was too great a tendency to spontaneous combustion, in which the wooden gratings or sieves would have disappeared like tinder. At the London Gasworks, where six pipes have been laid on and an exhaustor fitted up for revivifying in the purifiers, Mr. Watson does not appear to have enough confidence in the plan to adopt it in everyday work. The possible fate of the wooden sieves, upon which there is no insurance, stands much in the way of the attempt. At the Commercial works, however, Mr. Jones has his apparatus in readiness, and may have already commenced, indeed, to revivify Hills' oxide in his purifiers.

We ought here to notice the presence of the vapor of naphthaline in gas, and which begins, indeed, to deposit in thin, micaceous looking scales of exceeding lightness, almost at the moment when the gas leaves the purifiers. Indeed, large patches of naphthaline flakes may often, if not generally, be found on the undersides of the lids of the purifiers themselves, and this singular substance will often choke the largest main so as almost entirely to prevent the passage of the gas. A blast of steam turned into the mains will disperse the obstruction like snow, but a sort of chimney sweeping contrivance, called "a cat" is oftener employed to open the great routes of communication between the gasworks and the consumers. Fortunately, too, naphthaline is seldom deposited at any considerable distance from the works, and it can generally be cleared without going off the premises.

As to the cause of the deposition of naphthaline from gas, there are various opinions, some attributing it to certain electrical conditions of the atmosphere, but others, and by far the greater number, refer it to over purification and to the want of sufficient density in the gas. Some of the most experienced gas engineers in London have told us that there was trouble with naphthaline until the ordeal of official tests was established. Then it was, with increased energy to the purifying departments, and with heavier bills for oxide of iron and lime, that the "cat," or a blast of steam, had to be sent, every few weeks, through the mains leading out of the works. "Send out a little sulphuretted hydrogen," we hear, "and there will be no trouble with naphthaline." Of this we are not sure, but most gas engineers appear to be agreed that "rich" gas seldom, if ever, drops naphthaline. The Western Gas Company, who make only cannel gas, are never, or rather their engineer, Mr. Pritchard, is never troubled with naphthaline; indeed, from his own experience, he would never know what that troublesome substance really is. So at other works, it is understood that a few thousand feet of cannel gas sent through a main obstructed with naphthaline will clear it out completely, and a little Wigan, or Methyl cannel, or, best of all, a few hundred weight of Boghead will effectually clear any pipe in which naphthaline has formed. One of the most observing gas engineers in London informs us, too, that naphthaline is particularly liable to form where very small coal or "slack" is used for gas making, and that with large coal there is much less trouble.

We have followed the purification from am-

monia by water, that from sulphuretted hydrogen by oxide of iron or lime, and that from carbonic acid also by lime. In each case the removal of the offensive or debilitating matter should be complete, as with thorough exposure not a trace is left. But nothing, we believe, has been found commercially adequate to the removal of bi-sulphide of carbon from gas. From this compound the sulphur is only given up in burning, and with the consequent formation of sulphurous acid. A great deal of research and ingenuity have been expended in the attempt to remove this the last stronghold of sulphur in gas, and a year or two ago, many were led to believe that a Rev. Mr. Bowditch had really effected what was wanted by passing the rod over red hot lime. We have not, however, heard much of this plan lately, and we are therefore inclined to suppose that it has not answered any practical purpose. But, after all, what does the presence of bi-sulphide of carbon in gas really amount to? One of the ablest chemists in London, Mr. Versmann, already so well known that we need hardly say he was for several years the valued assistant of Professor Graham, made a report last year to Mr. Robert Jones, the engineer of the Commercial Gasworks, on the presence of bi-sulphide of carbon in the gas made by those and other works.

(To be Continued.)

PRESERVED COAL FOR NAVIES.

The great advantage of using large coal of high evaporative power for steam purposes generally, and more especially for marine purposes, is universally admitted; and it will consequently be gratifying to the shipping interest to learn that the Crown Preserved Coal Company's first year's operations have been of the most successful character. The blocks of fuel manufactured by this company are of the uniform size of one cubic foot, and of the uniform weight of 56 lbs.; whilst the space required for stowage is materially less.

To show the practical advantage of using preserved coal, the company quote an instance of a steam voyage to Rio Janeiro:

The quantity of coals to be taken from Southampton would be 1000 tons, at a cost of about £900, and occupying 1050 tons of space. On the other hand, 1000 tons of preserved coal would cost £100 more, but there would be a saving of 250 tons of space, which, at the usual rate of £6 per ton of freight, would produce £1500. This amount would not only pay for the preserved coal, but leave a surplus of £400 extra profit, merely for the outward voyage.

Amongst the other advantages claimed for the artificial fuel, as compared with ordinary coal, are the circumstances that by the process employed the fuel is made so dry that decomposition is arrested; that it is free from dust, and nearly as clean as blocks of stone; that it is not liable to spontaneous combustion, neither does it emit gas or smell of any kind, nor involve risk or injury of cargo, and that the evaporating power of the fuel is nearly 10 per cent. greater than any other description of coal known. The fuel has been favorably reported upon by Commander Watson, of Her Majesty's ship *Royal Albert*, and has been extensively used by several of the large steam navigation companies.—*Lond. Mining Journal*.

MONETARY AND COMMERCIAL.

Since our last week's issue the fall of Memphis has made a slight stir among business men, but it has not in the least affected the market for loans. The demand for loans is as dull as at any time heretofore with a continued increase of unemployed capital. There has been an increased local demand for gold, to be used in buying southern staple goods, the Secretary of the Treasury having opened the Mississippi to trade as far as in the possession of the Government troops. The following is the correspondence on that subject between the President of the Cincinnati Chamber of Commerce and the Secretary of the Treasury:

"CINCINNATI, June 9, 1862.

"I would like to announce by authority that shipments of provisions and manufactures may be made to Memphis; and also to New Orleans, if Vicksburg is taken. Our merchants and manufacturers will not abuse the privilege.

(Signed) "JOSEPH C. BUTLER,
"President Chamber of Commerce."

To this dispatch Secretary Chase responded as follows:

WASHINGTON, June 9, 1862.

"Shipments may be made to Memphis, and all other places in possession of the United States forces, under the existing regulations to prevent aid to the rebels, and subject to the inspection and control of the military commanders at points of arrival and destination; and also from all such places, with permission of the military commanders.

"Tender to the Chamber of Commerce, and my fellow-citizens of Cincinnati, my heartiest congratulations on the partial reopening of our great rivers, soon, I trust, to be completed. May they never again be closed to American commerce.

(Signed) "S. P. CHASE."

The Exchange market has not changed since last week's report. The supply is ample to meet the demand. Rates are

	BUYING.	SELLING.
New York,.....	par	②½ prem
Boston,.....	par	②½ prem
Philadelphia,.....	par	②½ prem
Baltimore,.....	par	②½ prem
Gold,.....	4 prem.	4½ prem.

The crop prospects throughout the west as far as we can learn are as favorable as could be desired. The weather during the past week having been clear and cool, the small grains are filling rapidly, and harvest will soon be upon us. Many fields of barley in this neighborhood are already beginning to whiten, corn is a little backward, but it has plenty of time to rally. There are terrible complaints made by southern papers of the destruction of the wheat crop in Tennessee, Alabama and Georgia, by rust. This, added to the many sacrifices they have already been compelled to make to gratify the ambition of their political charlatans, will render them objects of pity and charity, and after they have come to fully appreciate the blessing of the government they have been blindly trying to destroy, they

will find the North and Northwest as willing to administer to their wants as they have been to send their sons and brothers to put down the unholy rebellion. The first call for aid of this character has just reached us from Gen. Halleck, and met with a ready response from the citizens of St. Louis.

In relation to stocks, the New York *Tribune* of Monday, says, "under these favorable indications the market rallied, and the recovery was quite marked, particularly in Government and such stocks as the New York Central, Erie, etc., closing as follows, with a firm market: United States 6s, Registered, 1881, 103@103½; do. Coupons, 106@106½; United States Fives, 1874, coupon, 96½@96½; Treasury Notes, 7 3/4, —@—; Tennessee State 6s, 59½@60; Virginia State 6s, —@—; Missouri State 6s, 53@53½; American Gold, 104@104½; Pacific Mail Steamship Company, 116½@116½; New York Central Railroad, 91½@91½; Erie Railroad, 38@38½; Erie Preferred, 65½@66; Hudson River Railroad, 47@47½; Harlem Railroad, 14½@17; Harlem Preferred, 36@36½; Reading Railroad, 55½@55½; Michigan Central Railroad, 64½@64½; Mich. South'n & North'n Indiana Railroad, 26½@26½; Mich. South'n & North'n Indiana Guaranteed, 57½@58; Panama Railroad Company, 132½@132½; Illinois Central Railroad, 63½@63½; Cleveland & Pittsburgh Railroad, —@—; Galena & Chicago, 70½@70½; Cleveland & Toledo Railroad, 45½@45½; Chicago & Rock Island Railroad, 63½@64; Chicago, Burlington & Quincy Railroad, 76½@76½; Milwaukee & Prairie du Chien Railroad, 27½@27½.

The Toledo & Wabash Railway Company earned in the fourth week of May:

	1861.	1862.
Passengers,.....	\$6,284 09	\$6,604 67
Freight,.....	20,358 17	25,407 11
Total,.....	\$27,142 26	\$34,411 78
Increase,.....		7,259 52

EARNINGS FOR MAY.

	1861.	1862.
Passengers,.....	\$16,727 29	\$16,374 02
Freight,.....	61,559 32	90,471 42
Total,.....	\$78,277 61	\$106,845 44
Increase,.....		28,567 83

Earnings of the Chicago & North-Western Railway Company for the month of May, 1862:

Passengers,.....	\$24,081 31
Freight,.....	59,691 92
Mails, express, etc.,.....	2,656 86
Total,.....	\$86,429 99
Corresponding week, 1861,.....	\$4,891 39
Increase in 1862,.....	\$1,538 02

The road is now doing a heavy business, larger by much than ever before.

Weekly receipts for the month of May as follows:

	1862.	1861.	Increase
First week,.....	\$106,019 51	\$101,066 33	\$5,413 23
Second week,.....	138,407 12	124,934 22	69,543 90
Third week,.....	192,829 80	148,807 22	44,022 58
Fourth week,.....	186,463 82	140,435 67	46,028 15

The Buffalo, New York & Erie Railroad Company's earnings for May are as follows:

1862,.....	\$55,072 32
1861,.....	50,173 59
Increase,.....	\$5,898 73

Through business was suspended the last week of May by the destruction by fire of the bridges at Lanesborough, on the Erie Railway.

The details of the earnings of the Galena & Chicago Railroad Company for the week ending May 31st are:

	1861.	1862.	Decrease.
Freight,.....	\$46,370 89	\$45,894 25	\$476 64
Passengers,.....	8,671 19	8,264 08	353 16
Mails, etc.,.....	1,314 22	1,350 00	264 22
Total,.....	\$56,562 30	\$55,438 24	\$1,124 02
For the month, 1861,.....		\$165,707 22	
For the month, 1862,.....		150,371 57	

Decrease,.....\$15,935 63
Corrected earnings previous month,.... 90,179 64

The quotations for Railroad Bonds in New York are:

	Bid.	Asked.
New York Central 6s,.....	100½	100½
New York Central 6s, real est., 1864,.....	90½	90½
New York Central 7s, 1874,.....	103	106½
New York Central 7s, 1876,.....	107	107
New York Central 7s, conv. 1876,.....	107	108
Erie 6s, 1864,.....	102½	102½
Hudson River,.....	100	100
Erie 1st mortgage,.....	107	109½
Erie 2d mortgage,.....	104	104
Erie 3d mortgage,.....	98	98
Erie 4th mortgage,.....	91½	91½
Erie 5th mortgage,.....	*83½	86
Buffalo, New York & Erie 1st mortgage,.....	*91	92
Hudson 1st mortgage,.....	108	108
Hudson 2d mortgage sinking fund,.....	105	105
Hudson 3d mortgage,.....	9½	91
Harlem 1st mortgage,.....	112½	103
Harlem 2d mortgage,.....	100	100
Harlem 3d mortgage,.....	86	87
Michigan Central new 8 per Cents,.....	105½	106
Michigan Southern 1st mortgage,.....	94½	100
Michigan Southern Ass'd Bonds,.....	83½	83½
Reading Bonds,.....	100	100
Michigan Central 8 per Cent,.....	184	101
Milwaukee & Prairie du Chien 1st Pref.,.....	87½	89
Milwaukee & Prairie du Chien 2d Pref.,.....	65	66
Milwaukee & Prairie du Chien 3d Pref.,.....	96½	96½
Pittsburg, Fort Wayne & Chicago 1st,.....	96½	96½
Pittsburg, Fort Wayne & Chicago 2ds,.....	80	82
Cleveland & Pittsburgh 1st mortgage,.....	97½	99
Cleveland & Pittsburgh 2d mortgage,.....	89	91
Cleveland & Pittsburgh 3d mortgage,.....	80	80
Cleveland & Pittsburgh 4th mortgage,.....	64½	65
Michigan Southern Sinking Fund,.....	94	94½
Northern Indiana 1st mortgage,.....	100	101
Northern Indiana Goshen of 1868,.....	99½	100
Illinois Central Construction,.....	95	95½
Michigan Southern Sinking Fund,.....	98	98½
La Crosse & Milwaukee Land Grants,.....	19	19
La Crosse & Milwaukee Low Numbers,.....	—	—
Chicago & Rock Island 1st Mortgage,.....	104½	106½
Galena & Chicago 1st mortgage,.....	101½	101½
Galena & Chicago 2d mortgage,.....	100	100
Humboldt & St. Joseph bonds,.....	46	47
Cleveland & Toledo Sinking Fund,.....	97	97
Chicago, Burlington & Quincy 8 per cents,.....	116½	116½
Lake Erie & Wabash 1st mortgage,.....	92	92
Lake Erie & Wabash 2ds,.....	68½	69
New Jersey Central 1st mortgage,.....	105½	105½
New Jersey Central 2d mortgage,.....	102½	102½
Delaware, Lack. & Western 1st mortgage,.....	104	104
Delaware, Lack. & Western 2ds,.....	102	102
Lackawanna & Western bonds,.....	—	103
Terre Haute & Alton 1st mortgage,.....	*106	106
Terre Haute & Alton 2d mortgage,.....	86	86
Chicago & North-Western 1st mortgage,.....	62½	63
Chicago & North-Western Sinking Fund,.....	96	97
Chicago & North-Western 2d mortgage,.....	24	24½
Chicago & North-Western 1st assorted,.....	45½	45½
Chicago & North-Western interest bonds,.....	79½	79½

* Ex interest.

CINCINNATI & CHICAGO AIR LINE R. R.—The General Ticket Office of this company has been removed to Chicago, and reports of ticket sales as well as communications appertaining to this department should be directed to Charles E. Follett, Gen. Ticket Agent, Chicago. Drafts for ticket balances should be made on Henry Morgan, Esq., Treasurer, Richmond, Indiana. This line is now the only one running two daily Express Passenger trains from this city to Cincinnati. It is also by forty miles the shortest and two hours the quickest route between Chicago, Indianapolis, Louisville and Cincinnati.

During the past winter this company has built and opened a first-class eating house at Kokomo Junction, where ample time is given on all trains, for meals.

The road is now in good condition. The country through which it passes is beautifully attractive, and its management is every day winning on public favor—West. R. R. Gaz.

General Railroad Arrangement.**UNION TICKET OFFICES.****LITTLE MIAMI AND COLUMBUS**

AND

XENIA RAILROAD.**TRAINS RUN AS FOLLOWS**
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:30 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:30 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:10 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:10 P. M.
Dayton and Richmond.....	9:00 P. M.	10:10 A. M.
Day., Toledo & Day. Huntsville.....	5:20 P. M.	1:10 A. M.
Cin & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY Night in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Terre Haute and Lafayette and Chicago Mail.....	5:05 A. M.	11:10 A. M.
Indianapolis and Chicago Night Express.....	3:20 P. M.	11:50 P. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.**TWO TRAINS LEAVE CINCINNATI DAILY.**
For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

ns run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
u sville and St. Louis Mail.....	5:00 A. M.	10:45 P. M.
ymour Accommodation.....	3:00 P. M.	8:45 A. M.
uisville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots.

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

General Ticket Agent Indianapolis & Cincinnati Railroad.
General Ticket Agent Ohio & Mississippi R. R.**McCALLUM, BRISTOL & CO., BRIDGE & DEPOT BUILDERS.**McCallum, Bristol & Co., are prepared to construct **McCALLUM'S PATENT INFLEXIBLE ARCHED TRUSS BRIDGE**, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge and in the most approved and perfect manner. Parties desiring information, will please apply to the firm at their Office 99 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y.
Ag. 26.**MIDDLETON & STROBRIDGE, LITHOGRAPHERS AND ENGRAVERS,**

Walnut St., CINCINNATI.

Special attention given to all kinds of work in outline, such as Show Cards in one or more colors, Maps, Bonds, Portraits, Certificates of Stock, &c., &c.

J. T. CRAFTS,**ATTORNEY AT LAW,**

OFFICE:

N. W. Cor. Walnut & Sixth streets,

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CINCINNATI

ERIE RAILWAY.**Great Broad Gauge, Double Track and Telegraph Route**

TO

NEW YORK, BOSTON, AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DONLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.
Feb 6.

CHARLES MINOT, Gen'l Sup't

Baltimore and Ohio Railroad**RE-OPENED!**

This great national thoroughfare is again open for

Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition,

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

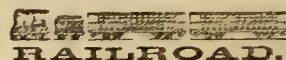
In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wes. Ag't, Baltimore, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.**CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANA-POLIS AND CINCINNATI SHORT-LINE****SHORTEST ROUTE BY THIRTY MILES.**

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily for the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M.; Chicago at 6:00 A. M., connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

KNOX & SHAIN, Engineering and Telegraphic

INSTRUMENT MAKERS.

218 WALNUT ST., PHILADELPHIA.

(Two Premiums by Franklin Institute.)

OHIO & MISSISSIPPI RAILROAD.**CINCINNATI AND ST. LOUIS.****Through without Change of Cars.****TWO DAILY TRAINS FOR VINCENNES, Cairo, and St. Louis.**

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:50 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.

RETURNING.—Mail Train Leaves East St. Louis.—(Sundays excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M., arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office No. 5 East Third street; No. 1 Burnet House, corner north-west corner of Front and Broadway; Spencer House Office; and at the Depot, corner of Front and Mill Streets.

G. B. McLELLAN, Gen'l Superintendent.
Omnibuses call for Passengers,
Novemb 11th, 1861.

1861. 1861
FAST TIME.
LITTLE MIAMI
 AND
COLUMBUS AND XENIA
 AND
CINCINNATI, HAMILTON & DAYTON
RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Eaton, Richmond, Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty.
 7:40 A. M.—Morrow Accommodation—From Little Miami Depot.

3:30 P. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Richmond, Indianapolis and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.
 7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express—From Cincinnati, Hamilton and Dayton Depot—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,
 General Ticket Agent

Omni-buses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
 No. 67 West 6th St. bet Walnut & Vine
 CINCINNATI O

W. MORRILL. G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of
 C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in every case.

1862. 1862.
Pennsylvania Central R.R.
 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
 FOR SAFETY, COMFORT AND SPEED,
 TO ALL THE EASTERN CITIES!
 THE TRACK IS STONE BALLASTED
 AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
 (with close connections from Western Cities.)
 ALL CONNECTING DIRECT TO NEW YORK.

THROUGH PHILADELPHIA,
 AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
 ONE TRAIN RUNS DAILY (130 MILES.)
VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
 BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.
 ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, and to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
 D. A. STEWART, Freight Agent, Pittsburgh.
 CLARKE & CO., Transfer Agents, Pittsburgh.
 R. C. MELDRUM & CO., Madison, Indiana.
 J. E. MOORE, Louisville, Ky.
 W. W. AIKMAN & CO., Evansville, Ind.
 R. F. SASS, St. Louis, Missouri.
 CLARKE & CO., Chicago, Illinois.
 W. H. & E. L. LANGLEY, Gallipolis, Ohio.
 G. B. NEAL, Parkersburg, Virginia.
 HALL & CO., Marietta, Ohio.
 H. S. PIERCE & CO., Zanesville, Ohio.
 McDOWELL & McCORM, Portsmouth, Ohio.
 R. MCNEELY, Maysville, Ky.
 J. P. JOHNSTON, Ripley, Ohio.
 JOHN TODD, Covington, Ky.
 G. L. HEATON, Cleveland, Ohio.
 R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
 L. L. HOUPPT, Gen'l Ticket Agent, Philadelphia.
 H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

BUSH & LOBDELL.
Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,
 MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

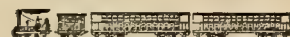
OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET
NEW YORK.

ALBERT BRIDGES.

JOEL C. LANE

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

through Distance 280 Miles;

12 Miles Shorter than any other Route
NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M., 1:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth Street Depot.

Freight trains leave at 6:00 P. M. and run directly through to Chicago without rebilling or transhipment

JOHN BRANT, JR., Superintendent.

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent,
 33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON,
STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and takes collection

LOW'S RAILWAY DIRECTORY

FOR 1861

CONTAINING

THE NAMES AND RESIDENCES

OF THE

PRESIDENTS, DIRECTORS

AND

OFFICERS

OF ALL THE RAILROADS IN THE

UNITED STATES

If they could be ascertained.
Published by James W. Low.

Price one dollar.

Sent postage prepaid by mail for one dollar and twenty cents.

A few copies only for sale at the office the Railroad Record,

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N. W. BALDWIN,

MATHEW BAIRD.

M. W. BALDWIN & CO.
ENGINEER'S

BROAD AND HAMILTON ST.

Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for ahesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine. Particular workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned
THEODORE DEHON,
101 10 Wal Broadway, New York

EDWIN J. HORNER,

SUCCESSOR TO

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LOCOMOTIVE & RAILROAD
CAR SPRING

MANUFACTURER,

WILMINGTON, : DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky.,

Lafayette, Ind.,

Indianapolis, Ind.,

Columbus, O.,

Dayton, O.,

Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being all on both sides, impossible to unravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.
WM. SUMNER & CO.

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WROUGHT IRON

ARCH BRIDGES

—AND—

Corrugated Iron Roofs

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Sot. 2. MOSELEY & CO.

JAMES FOSTER, Jr. & CO.,
MATHEMATICAL AND PHILOSOPHICAL INSTRUMENT MAKERS,
S.W. CORNER FIFTH AND RACE,
Cincinnati Ohio.

Drawing Instruments, Scales of all Kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

H. TWITCHELL.

JAMES FOSTER, Jr.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
Ag. 4 m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods.

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works
June 9.

THE SCHENECTADY

LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, President.

WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1 1/4 to 10 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from 1/2 inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas, Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—from 1/4 to 24 inches diameter, and branches for same, &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS,

THOS. T. TASKER, JR.,

CHAS. WHEELER,

S. P. M. TASKER,

HY. G. MORRIS.

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, JUNE 10, 1862.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
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ADVERTISEMENTS.

the space occupied by ten lines of Nonpareil.	
square, single insertion.....	\$1 00
per month.....	3 00
“ six months.....	12 00
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THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrearages are paid.

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If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.

Cincinnati, Hamilton & Dayton—

Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	10.10 A. M.

Dayton, Lima, Toledo & Hunts-

ville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.10 A. M.
		5.40 A. M.

Sandusky, Dayton & Cincinnati—

Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.10 A. M.

Marietta & Cincinnati—

Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.

Ohio & Mississippi—

Mail.....	5.05 A. M.	10.05 P. M.
Seymour Accommodation.....	3.00 P. M.	8.45 A. M.
Express.....	5.00 P. M.	6.53 A. M.

Indianapolis & Cincinnati—

Mail.....	5.05 A. M.	11.10 A. M.
Chicago Express.....	3.20 P. M.	11.50 P. M.

Dayton & Michigan—

Toledo, Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.

Cincinnati & Chicago Air Line—

Mail Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.

Cincinnati, Wilmington and Zanesville—

Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.

Kentucky Central— (City time.)

First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	9.00 P. M.	6.40 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

THE COST (TO RAILROADS AND TO INDIVIDUALS) OF MAKING PASTURE-GROUNDS OF PUBLIC HIGHWAYS.

Some things in our state of civilization are very extraordinary, and if fairly presented to the minds of intelligent men would startle them. One of these is the custom of allowing every man to be a deliberate trespasser on the public and on all his neighbors; and as a consequence of this, the enormous and unnecessary waste of money. This is done by permitting animals to run and feed on the public highways. The cost of this practice (to say nothing of its continual annoyance), is prodigious. A law has recently been passed requiring all the railroad companies to fence in their roads. The companies have found it difficult to do so, and the time has been twice extended. The only reason why this is necessary is the continual running of animals on the track, by which the safety of the trains is endangered. In our present barbarous state of society, as it regards this subject, this measure is necessary. It is not safe to leave the roads unfenced, and the companies must be compelled to fence their roads. It will cost the roads of Ohio (making 3,000 miles) when completed a million and a half of dollars to make these fences.

This is the tax which railroad companies have to pay for the custom of individuals pasturing their cows and hogs on the public highway. The injustice of this custom is so obvious, when examined, that the courts have begun to hesitate as to giving any damages in case of cattle destroyed on the roads; for what right had the owners of cattle to allow them to run at large on railroads? A decision of the Supreme Court was recently made, that a railroad company was bound to no more than common care in avoiding cattle, and the engineer was not obliged to slacken speed on their account. This is just, and in nine cases out of ten hereafter no damages will be given for the destruction of cattle on highways.

The cost, however, to railroad companies is nothing compared with the cost to the community. Recently this subject has come under discussion, and it is astonishing what a cost the community quietly bear for a barbarous practice. The Agricultural Society of the State of Maine made the following statements on this subject:

"The fences of the State have cost \$25,000,000; the repairs require \$2,500,000 annually; 6 per cent. interest is \$1,500,000; and a renewal in twenty years would be \$1,250,000, making the total yearly expenditure \$5,250,000—or two-thirds the original cost of the Erie Canal. A strong argument in favor of soiling. Estimated cost of road fences, supposed to be at least one-sixth part of the whole, \$4,125,000.

"The interest and cost of annual repairs and renewing would be \$531,000—the tax paid

annually by the farmers of Maine to make the highway a public pasture. To this sum is to be added \$150,000, the yearly cost of breaking through the snow-drifts caused by such fences, and opening roads. These estimates will do to apply to other places besides Maine. The custom now is that every man shall fence out all intruders; the time may come when this will be among the things of the past, as much as that of walling towns to shut out human marauders."

The report of the Commissioner of Statistics for Ohio says:

"We have in this State 62,000 miles of common roads. So much of these as are unfenced will be fully made up by the lanes and by-roads leading to farm-houses and distant fields. Double the length of common roads, and we have the fencing, to-wit, 124,000 miles road fence, or one-fourth the whole amount. The annual repairs on this fourth comes to \$2,500,000; and the interest on the original cost is \$2,200,000—making the annual expenditure for road fences \$5,700,000. It is entirely safe to say that one-half of this expenditure would be entirely unnecessary, if no animals were suffered to run at large. Two millions and a half per annum would be saved to the State, if it would protect each proprietor in the possession of his property. In Ohio there are no commons. In most of the counties there is not a single acre upon which any man but the proprietor has a right to put animals."

These are very curious facts, and ought at least to excite the public attention. We may remark:

1st. Fences are made to keep in our own animals, and not to keep out other people's. All animals found on grounds of others than the owner are trespassers, no matter whether there are fences or not. We are not bound to keep fences up to keep out other people or their animals.

2d. The public highway is not "commons." On the contrary, all the rights the public have in it is to pass over it. It is a highway, and not commons. The road between A and B belongs to A and B in fee simple; but the public have a right of way over it. When the neighbors of A and B turn out their hogs and cattle to feed on it, they are trespassers and are taking what does not belong to them. They have a right to drive their cattle over it, but that will do no harm, for they will be kept in the road. If it be said that some fence will be necessary, it is enough to say that a single bar, at half the cost of a common fence, will be enough.

Taking a fair view of this subject, the practice of compelling proprietors of land to fence out intruders, must be regarded as little else than barbarism, which must be done away, before proprietors can be said to be protected in their rights. Granting that some road fences must be kept up, they might be made at very little expense comparatively were it not

that the owners were obliged to make high and strong fences to keep out intruders who are allowed by law to trespass on their neighbors.

B. DE N. & M. RAILROAD.

LAKE SUPERIOR IRON.

Few readers, in these exciting war times, keep pace with the great progress of the arts of peace which are everywhere being pushed forward in the northern States, just as if the nation was not in the midst of the greatest war the world has ever seen.

Among the recent works—though small in itself—there are none that are likely to be followed by grander results than those to flow from the completion of the B. De N. & M. Railroad—the little line of railway of 17 miles that connects Lake Superior at Marquette with the iron mountains of that famous mineral region. This work was begun in 1854-5. In 1857 it was completed to the Jackson and Cleveland Companies' location (14 miles), and in 1858 to its present terminus on the property of the Lake Superior Company. The average grade of this road is high—amounting to 53 feet to the mile—the whole elevation attained being 850 feet. This, however, is a matter of little consequence, as the movement of freight will be principally in the direction of the lake—a down grade. The road has now employed four locomotives, which are kept busy in the movement of the iron from the mines to the lake. The total cost of the road, docks, equipments, warehouses, etc., was about \$750,000—a large sum for an isolated railway in the woods, hundreds of miles from any connecting lines, save the steamers on Lake Superior. But the object of the road was the development of the iron deposits—which are here probably in a richer and more accessible form than in any other part of the world. We find in a late number of the *Western Railroad Gazette* some very interesting facts in regard to these iron mines.

From surveys actually made, it appears that the iron deposits are to be found at intervals for more than one hundred and fifty miles, extending to the boundary line of Wisconsin, and in width varying from six to twenty-five miles. The rocks with which the ore is associated, says the *Gazette*, are a series of talcose and micaceous slates belonging to what is styled by geologists the Azoic system of rocks. Two good members of this system have been recognized by Sir Wm. Logan, the Canadian geologist, and named by him the Laurentian and Huronian systems, and in the latter of these, which is the more recent of the two, are located the iron ores of Marquette. These ore mountains—and they are veritable mountains—are flanked on each side by masses of granite rock, which form the axis of upheaval of the Azoic rocks.

The ore is mainly the peroxide in a state of almost chemical purity, and containing

about seventy per cent. of metal—the only impurity being a small amount of silicious matter, with perfect freedom from sulphur, phosphorus, titanio acid, or any ingredient noxious to the quality of the manufactured iron. The iron deposits of Sweden and Northern New York, which are located in rocks geologically equivalent to those containing the ores of Lake Superior, are composed either of a mixture of the peroxide and the magnetic oxide of iron or the latter solely, but their quality is not so good, and the iron fabricated from them is by no means as tough and fibrous as that produced by the metallurgical treatment of the Lake Superior ores. For tenacity and strength this latter is unequalled. The British Admiralty proof chain-cable stud-link, the round iron of which is seven eighths of an inch in diameter, is fourteen tons; the American proof of the same, fifteen tons. From these data we may appreciate the testimony of D. B. Martin, formerly Engineer-in-Chief U. S. N., when he states that "a piece of Lake Superior iron was beat down to one half inch in diameter, made into chain link, tested in the chain proving machine and broke at 199,120

The process for the removal of the ore, says the same authority, is exceedingly simple; no mining but simple quarrying or blasting into the sides of the bluffs is all that is required. The cost does not exceed fifty cents per ton of ore. The ore is mostly transported on the railroad to Marquette, and shipped to points on the lower lakes—the larger proportion of it reaching Erie, though some is treated near Detroit and Cleveland, reaching thus the great bituminous coal-fields of the States of Ohio and Pennsylvania. The whole region where these ores occur is densely wooded, so that charcoal may be furnished at moderate prices for a long time. Already some furnaces are in operation near Marquette and the exports of pig-iron form no inconsiderable item in the trade of that village. The following will exhibit the production of pig-iron for a series of years.

1858.....	2,000 tons
1859.....	6,000 "
1860.....	5,000 "
1861.....	5,287 "

The exports of ore from Marquette since the opening of the Saut Canal, are thus given by the *Gazette*.

In 1855 there were shipped.....	351 tons of ore
" 1856 " " "	6,733 " "
" 1857 " " "	27,000 " "
" 1858 " " "	30,227 " "
" 1859 " " "	80,000 " "
" 1860 " " "	150,000 " "
" 1861 " " "	48,979 " "

It will be seen that there was a great falling off in this trade last year; but there is every prospect of the business being larger than ever this season. New furnaces are being erected at various points for the working of this iron, and in New York a large Company is forming for the purpose of building furnaces on the plan of Prof Rodgers, of New Jersey, with rolling mill &c., for the exclusive manufacture of this iron, which is regarded

by practical iron men as the best in the world—being easily worked, of strength unsurpassed, and admirably adapted to plating of war vessels, from its great firmness and power of resisting the contact of shot. The works of this company will be situated at South Brooklyn, and if properly managed, will no doubt prove very profitable. It is estimated that iron can be turned out at their works at \$35 per ton.

MICHIGAN SOUTHERN & NORTHERN INDIANA RAILROAD.

THE annual report of the M. S. & N. I. Railroad shows an increase in the gross earnings of the road over last year of \$150,839 65, with an increase of \$73,140 27 in the expenses, leaving as the increase in net earnings, \$77,700 38.

The earnings for the fiscal year ending February 28, 1862, were:

From freight.....	\$1,419,497 94
" passengers.....	719,417 28
" mails.....	53,666 00
" express.....	24,753 85
" rents.....	23,219 18
" dividend on assets.....	1,000 00
" all other sources.....	13,663 66

Total.....	\$2,250,517 91
Expenses were.....	1,112,970 11

Net earnings.....\$1,137,547 80

Add—

Bonds issued in funding coupons, scrip and in settlements.....	\$122,000 00
Less reduction of outstanding scrip.....	6,996 67
Received on account of " bonds not accounted for," as explained in last report.....	15,000 00
" Nominal Assets " extinguished by settlements.....	17,299 42
Proceeds sale bonds of other Co.'s.....	13,537 88

Total to account for.....\$1,298,388 43

Disposed of as follows, viz:

Interest on funded debt.....	\$730,161 98
Interest on floating debt, exchange, and discount.....	42,053 32
Taxes.....	51,962 07
Rent Erie and Kalamazoo Railroad.....	30,000 00
Contributions to sinking fund.....	83,637 31
Old claims and judgments.....	19,648 92
Loss by Illinois currency, and other items.....	36,818 73
Paid floating debt.....	156,771 03
Construction.....	15,284 34
Equipment.....	64,767 02

Detroit, Monroe and Toledo R.R.:

Three small land damage claims.....	139 00
Balance.....	65,441 66
	\$1,298,388 43

The condition of the general finances of the company, as set forth in accompanying tables, and the progress made during the past two years in improving the condition of the company's finances, will be best understood by reference to the following remarks:

The apparent increase of the bonded debt made during the past two years is \$197,000, but in reality only \$104,000, as \$93,000 of the amount consisted of issues and discrepancies previously made and existing.

In addition to the \$66,000 deficiency in bonds on hand, as last year reported, the correctness of which report has been since confirmed, and the \$9,000 discrepancy in sinking fund bonds, there was an increase of issue made in fact, but not made to appear, previous to March 1, 1860, of \$18,000 Detroit, Monroe and Toledo bonds. These had been properly disbursed, but no issue entry made thereof until during the past year.

In addition to the above amount of \$93,000 increase in the bonded debt over the amount apparent May 1, 1860, there were various items of liabilities not reported in March, 1860, and since ascertained, which, added to the former, show that the amount of funded and floating liabilities against the company in March, 1860, was \$317,017 83 in excess of the amount apparent by the report of that date; \$224,017 83 of the amount belonging to the floating debt.

The amount of floating debt reported in March, 1860, was \$1,086,793 60. Add amount as above, since ascertained, and the sum total is swelled to \$1,310,811 43. The amount of floating debt March 1, 1862, as per table herewith, is \$219,687 54. Against this amount of floating debt we have assets, not reported yet of "available assets," but stated in the succeeding "Condensed Balance Sheet," and ultimately to be available, amounting to \$69,141 24.

The plan adopted by the Board of Directors in September, 1860, for relieving the floating debt of two years' interest on the second mortgage bonds, by funding the coupons into bonds of the same class, has been entirely successful, the coupons from all the bonds but an inconsiderable fraction of a few bonds held in the Southern States, and as yet inaccessible, have been so funded. The regular payment of interest on these bonds was resumed in November last.

Of the plain bonds, 405 in number, outstanding in September, 1860, all but 144 have been converted into the Detroit, Monroe and Toledo bonds, and their interest funded.

Of the four classes of first mortgage bonds, convertible into the sinking fund first general mortgage bonds, \$276,000 have been so converted during the year.

The holders of the Michigan Southern first, and the Northern Indiana first mortgage bonds, now past due, have availed themselves of the right to convert them into the first mortgage sinking fund bonds, to the extent of \$246,000; all of this amount, but \$24,000, having been so converted during this year.

Though the company have been unable to pay these bonds at maturity, such of the holders as have not yet converted their bonds have, with entire unanimity, manifested their willingness to await the ability of the company; and in no case has any disposition been apparent to annoy the company by any attempt to enforce payment.

In view of the extent to which conversions have already been made, and of the appreciation in market value of the sinking fund bonds to the neighborhood of par, it is confidently believed that the holders of the over-due bonds will ere long convert the balance of those bonds still outstanding into the sinking fund bonds, according to the original provision for consolidating the first mortgage debt of the company. Without doubt, were we now able to announce such conversion as completed, the sinking fund bonds would immediately rise to command a premium in the market, and take the place to which their merits entitle them, among the highest priced first class mortgage securities of our most profitable railroads.

The holders of the first mortgage bonds, secured by liens on fractional parts only of the road-bed and track, must appreciate the fact, that they can in no other way so surely enhance the value of their property as by converting them into the first general mortgage sinking fund bonds.

The contribution to the sinking fund, during the past year, has absorbed \$102,000 of the sinking fund bonds, the Commissioners of the

sinking fund now holding \$372,000 of these bonds.

The proportions now assumed by the sinking fund are so great, and such is the rate of its annual increase, that if the convertible bonds were all converted into the sinking fund bonds without further delay, the amount of these latter bonds outstanding would be less than \$6,000,000. This amount would be secured by the sole first mortgage upon the entire road of this company and its branches, and all the company's real estate and equipment. With net earnings exceeding \$1,100,000 annually, the quality of this security is determined, without the necessity of resorting to argument.

Our business for the year, large and promising as it has been, would have been considerably larger had not the want of facilities forced us to refuse much that offered. Two adverse causes operated to produce this result. One was the want of more storage room and appliances for handling the grain receipts at Toledo. The other, from which we suffered most severely, was the inability of our easterly connections to take away our freight as rapidly as our road could supply it for their carriage.

The first of these wants, resting within our own jurisdiction and control, we have taken effective steps to supply; and a new grain-elevator is constructing at Toledo, which will be completed in May, and will double our capacity for storing and handling the grain transported over our road.

In relation to the detension of eastward-bound freight, the Board entertains the belief that the causes operating to produce such detension will be removed in the future.

In reviewing our present condition, in comparison with what it was two years since, we find the company relieved from the incubus of an embarrassing floating debt, and that the reduction of its present small amount has been effected without any material increase of the bonded debt; we observe a gratifying progress making in the conversion of the first mortgage over-due bonds into the first mortgage sinking fund bonds; also the release of the company from many judgments and legal obligations then surrounding it; and, finally, we see an increased and more economically administered business.

A continuation, which may be reasonably expected, of this business, and the conversion of the over-due bonds completed, or nearly so, and the stockholders might see in the immediate future a prospect of income from their property, which but two years since was generally regarded as utterly valueless.

The floating debt of the company was,

March 1, 1862.....	\$449,550 90
Deduct available assets.....	229,872 36
	\$219,687 54

The following bonds are on hand or pledged as security for obligations of the Company:

Second general mortgage bonds unissued.....	\$428,000 00
Detroit, Monroe and Toledo bonds on hand...	316,000 00
Plain bonds.....	255,000 00
	\$999,000 00

The funded debt of the company, March 1st, 1862, was:

*Michigan Southern first mortgage bonds, due November, 1860.....	\$850,000 00
*Northern Indiana 1st mortgage bonds, due August, 1861.....	904,000 00
Erie and Kalamazoo mortgage bonds, due March, 1862.....	300,000 00
*Jackson Branch mortgage bonds, due August, 1863.....	128,000 00
*Goshen Line mortgage bonds, due August, 1864.....	1,116,000 00
Detroit, Monroe and Toledo, due February, 1876.....	684,000 00

Second general mortgage bonds, due November, 1877.....	2,572,000 00
Sinking Fund bonds, 1st general mortgage, due May, 1885.....	\$3,402,000
Less held by Co.'s S. Fund.....	372,000
	3,030,000 00

Total mortgage bonded debt.....	\$9,584,000 00
Unsecured funded debt (convertible into D. M. & T. bonds):	
Bonds of the Michigan Southern R.R., due March, 1863.....	\$44,000
Bonds of Northern Indiana R.R., due February, 1863.....	100,000
	144,000 00

Total bonded debt, secured and unsecured...	\$9,728,000 00
Script issued for funded coupons, outstanding	22,707 51

Total funded debt.....	\$9,750,707 51
Amount of funded debt reported last year...	9,719,704 18

Increase.....	\$31,003 33
---------------	-------------

The Northern Indiana bonds, due August 1, 1861, are secured by the first mortgage, dated in 1851, upon the road of the Company, from Goshen to the line of Illinois.

The Erie and Kalamazoo Bonds, due March 1, 1862, are secured by a mortgage upon the road between Toledo and Adrian.

The Jackson Branch roads are secured by a first mortgage upon that branch extending from the main line at Palmyra to Jackson.

The Goshen Line Bonds are secured by a first mortgage on the road in Ohio and Indiana, between Toledo and Goshen.

The Detroit, Monroe & Toledo Company's Bonds are secured by a first and only mortgage upon the road of that company, between Detroit and the Ohio State line—about 51 miles.

The Sinking Fund Bonds, dated May 1, 1855, are secured by the only first mortgage that covers the entire road, rolling stock, and property, of the company.

The Second General Mortgage to secure the bonds of that issue is dated November 1, 1857, and covers the entire road, and is subject to all other mortgages.

The bonds all bear 7 per cent. interest—payable semi-annually.

The apportionment of freight and passenger earnings of main line and branches for the year was as follows:

	Passengers.	Freight.
Main Line.....	\$476,855 24	\$1,102,289 50
Air Line.....	49,997 05	157,038 22
Detroit, Mich. & Toledo.....	66,578 12	69,079 40
Jackson Branch.....	25,259 08	24,958 72
Monroe & Adrian.....	16,184 69	32,064 09
Three Rivers Branch.....	2,277 94	5,082 82
Storage.....		28,985 19
Military transportation.....	72,665 16	
	\$719,417 28	\$1,419,497 94
Previous year.....	749,237 24	1,236,568 71
Decrease.....	\$38,819 96	
Increase.....		\$182,928 23

Total number of through passengers, 57,094; 34,613 of whom were first-class, 11,707 second-class, and 10,774 third-class—yielding \$292,787 19. Way passengers, 280,546; of whom 278,390 were first-class, 1,178 second-class, and 978 third-class—yielding \$344,964 93. The number of miles traveled by through passengers was 13,962,242; by way passengers, 11,142,989—total, 25,105,231. The average number of miles traveled by each through passenger was 244.54; by way passengers 37.71. The average amount received from each through passenger was \$5 14.92; from each way passenger \$1 22.96. The average amount received from each through passenger per mile way 2.1 cents; from each way passenger, 3.26 cents.

Number of tons of through freight moved eastward, 143,306; westward, 39,833—total through, 183,139, yielding \$657,293 56. Way freight moved eastward, 181,757; westward, 87,812—total way, 269,569, yielding \$733,219 19. Total tons through and way freight east-

ward, 325,063, or 72 per cent; westward, 127,645, or 28 per cent.—total tonnage, 452,708, revenue as above, exclusive of storage, \$1,390,512 75, to-wit: from eastward bound freight \$1,023,112 10, or 76.6 per cent.; from westward bound \$367,400 65, or 26.4 per cent.—being in proportion of 2.75 tons eastward to 1 ton westward. The increase in eastward bound tonnage over the previous year was 34,639; in westward bound, 19,390. Increase in earnings on freight coming east \$184,570 98; decrease on freight going west, \$35,931 02.

The company own 83 locomotives, of which 54 are in good order, 4 in fair order, 15 wanting repairs, 5 rebuilding, and 5 not in use. Total number of miles run by engines, 1,775,728, to-wit: with passenger trains 657,970, with freight trains 970,859, with other trains 146,790. Average number of miles run to one cord of wood, 54.10; to one pint of oil, 19.29. Cost for repairs per mile run, 5.72 cents; average cost for fuel, 5.07 cents.

The rolling stock consists of 3 twelve-wheel and 63 eight-wheel passenger cars, 8 second-class, 7 emigrant and 22 baggage, mail and express, 6 drovers', 1 paymaster's, 3 wrecking, 20 gravel, and 956 freight and stock cars.

BALANCE SHEET.

<i>Dr.</i> —Railroad.....	\$13,616,404 30
Equipment.....	1,644,258 90
Steamboats.....	691,278 50
Detroit, Monroe & Toledo Railroad.....	1,985,182 28
Detroit, Monroe & Toledo stock at par.....	275,000 00
Fuel and materials on hand.....	197,331 95
Bonds and mortgages—foreclosed.....	69,141 24
NOMINAL ASSETS:	
Cin'ti, Peru & Chicago bonds.....	\$48,000 00
Toledo & Wabash Railroad stock.....	12,900 00
Bills receivable.....	132,605 07
Due from individuals.....	113,006 86
Terre Haute, Alton & St. Louis Railroad special bond.....	71,791 00
Sundry station balances in suspense.....	39,462 46
Oswego & Indiana Plank road stock.....	20,000 00
Judgment.....	6,497 39
Due from contractor.....	130 00
Income, or profit and loss.....	763,205 10
	\$18,988,595 05
<i>Cr.</i> —Capital stock, common, \$6,124,600.....	
Capital stock, guaranteed.....	2,893,600
	\$9,018,200 00
Funded debt.....	9,750,707 51
Floating debt.....	\$449,559 90
Less available assets.....	229,872 36
	\$18,988,595 05

President—E. M. GILBERT, New York.

Directors—E. M. Gilbert, Henry Keep, Allan Campbell, Albert Havemeyer, Milton Courtright, Hamilton White, Nelson Beardsley, William Keep, William Williams, Stillman Witt, John S. Barry, Philo Morehous, M. L. Sykes.

Vice-President—M. L. Sykes jr., Toledo,

Treasurer—Henry Keep, New York.

Secretary—D. P. Barhydt, New York.

General Sup't—John D. Campbell, Toledo.

Cashier—Wm. F. Staunton, Toledo.

Auditor—John J. Adam, Toledo.

* Convertible into sinking fund first general mortgage bonds.

The mortgage to secure the Michigan Southern Railroad Bonds, due November 1, 1860, covers the line of the old road in Michigan, from Monroe Pier to near the line of Indiana.

SHORTEST ROAD TO CALIFORNIA.—Emigrants from the States, bound to Carson Valley and California, are probably not aware that their shortest and best road is by the way of Denver. Starting from any point on the Missouri, they can save full two hundred miles travel, by following up the South Platte and through the mountains by the route survey by Mr. Berthoud last season. Their course of travel is then almost direct, cutting off the great elbow made by the old road in its de-

tour northward, to pass through the South Pass. This road is much better than the old one, being supplied with wood, water, and grass. Here the Rocky Mountain region is fertile. On the North Platte and in the region of the South Pass it is barren, almost devoid of timber, and scantily supplied with grass.

Loaded wagons can now pass without difficulty from Denver to Salt Lake City, and the traveler passes through the principal cities and the heart of Pikes Peak mining region. Remember it, travelers from the States, that if you do not want to stop at Pikes Peak, that you can take a look at the country and at the same time save over two hundred miles travel in your journey to California by coming by Denver.—*Denver (Colorado) News*, April 16.

PENNSYLVANIA RAILROAD.

The *London Economist*, pretty good authority in Financial and Railroad matters, thus compliments one of our leading lines of American Railroads:

"Considering the low estimate of Pennsylvanian credit in this country (England), it is somewhat singular to be able to point to a Pennsylvanian undertaking which, for lucidity of accounts, and the mode of distributing the profits, may serve as a model that our own railway directors may study with advantage. It is not so much the clear statement of the details to which we wish to direct attention as the manner in which the surplus profit is distributed.

The liabilities of the Pennsylvania Railway, up to the 31st December, 1861, are stated as follows:

The total amount of share capital was.....	\$13,261,100
First mortgage six per cent. bond.....	4,990,000
Second.....	4,647,400
Bonds held by the State of Pennsylvania, Five per cent.....	7,100,000
Mortgages on real estate.....	299,363
Bill payable.....	393,500
Total.....	\$30,594,363

The surplus of the year 1861, after paying all working expenses, amounted to \$3,675,174 which is distributed as follows:

Six per cent. dividend on \$13,264, \$100 capital stock.....	\$795,864
Six per cent. dividend on \$9,637,400 mortgage bonds.....	572,244
Seven per cent. guarantee on \$500,000 bonds on Steuben and Indiana Railroad.....	35,000
Interest on bonds and mortgages.....	31,421
Paid Harrisburg and Lancaster Railroad Company, under lease.....	28,847
Sundries.....	10,000
Taxes on capital stock and coupons.....	51,371
	\$1,624,629
Leaving a surplus undivided of.....	\$2,050,545
Of this surplus there is appropriated to a sinking fund for debentures.....	\$243,277
Do. Redemption of debt due to the State of Pennsylvania, and interest.....	\$460,000
(Which ratio will extinguish the debt in 1891).....	\$703,277

The balance of \$1,348,468, which still remains over, is applied to the extensions of roads, &c., and the purchase of locomotives and cars to meet the increased business of the line.

The point to which we desire to draw attention is, that out of the net profits there is nearly as much devoted to the redemption of debt as to the payment of dividends, and a sum nearly as large as both sinking fund and dividend fund united, is applied to the purchase of locomotives and cars to meet the increased business of the line. Our English system is to ignore posterity on the principle that pos-

terity never done anything for us. The Pennsylvania Railroad Company appears to carry its consideration for posterity to the utmost limits. Perhaps there is a happy medium wherein both systems might unite with advantage. But there is such a contrast between the practice of this American line and that of our English railways, that we cannot resist the opportunity of pointing to it."

GALENA & CHICAGO R. R. Co.—An agreement, to be binding when ratified by the stockholders of the respective companies, has been entered into between the Directors of this company and the Chicago, Iowa & Nebraska Railroad, and the Cedar Rapids & Missouri River Railroad Company, for a perpetual lease of their lines of road, the compensation to be fixed by a referee.

To the Chicago, Iowa & Nebraska Railroad the compensation is to be such a proportion of the gross earnings upon that road as the referee shall determine. To the Cedar Rapids & Missouri River Railroad Company the compensation is to be a certain proportion of the gross earnings on its road, or a specified sum per mile per annum, as the referee shall decide.

The lease of the Chicago, Iowa & Nebraska Road will also place the bridge and ferry across the Mississippi river at Clinton under the control and management of the company.

The lines of road proposed to be thus leased are an extension of the Galena Railroad westward from the Mississippi in nearly a direct line, and when completed, will, with the Chicago, Fulton, and Iowa line, form a direct through route from Chicago to the Missouri river.

Strenuous efforts have heretofore been made to unite these lines under one management, without success, and the present arrangement is the result of much deliberation by the committees from the respective Boards of Directors, which met in the City of New York on the 10th inst.

A meeting has been called of the stockholders to sanction this action of the Directors in reference to these proposed leases, and such award as the referee appointed shall determine.—*West. R. R. Gaz.*

APPARATUS FOR MELTING METALS.—In melting metals which cannot conveniently be exposed to the direct action of the fire, it is usual to employ crucibles or refractory pots, into which the metal to be melted is placed: this arrangement, however, allows of but a comparatively small quantity of metal being melted at a time, because the weight of metal becomes more than the crucible will bear, if made sufficiently thin to transmit the heat with facility. As an improvement upon the process, Mr. G. F. Muntz, of French Walls, Birmingham, (England,) proposes to place the metal in a vessel of brickwork, lined with fire-clay, and through the bottom of this vessel are formed holes or passages, which are covered with tubes similar to inverted crucibles without bottoms, and made in a similar manner of fire-clay or other refractory material. Under the vessel containing the metal a furnace is formed, and the heat passes up into and is transmitted through the refractory tubes to the metal, the vessel containing which is suitably covered. The refractory tubes may be arranged to pass horizontally, or in an inclined direction, through the metal-containing vessel, but the vertical arrangement is preferred. When the metal is melted in a crucible or pot, the weight tends to burst the sides of the vessel outwards, but when Mr. Muntz's

arrangement is employed the metal is exterior to the refractory vessel, and tends to press its sides inwards or crush it, a strain which is much more easily resisted than a tensile or bursting strain. The arrangement has the further advantage that any quantity of metal may be melted together, the melting vessel being made sufficiently large.

THE GASWORKS OF LONDON.

(Continued from page 200.)

Mr. Versmann gives as the results of experiments extending over 629 hours, or upwards of 26 days, and made upon 236 cubic feet of the Commercial Company's gas, in which the average grains of free sulphur found in each 100 cubic feet of gas was 2.99. In other short experiments, burning only 5 1-2 cubic feet of gas, the average was 6.35 grains per 100 cubic feet. Like experiments upon the Chartered Company's gas gave an average of 9.41 grains.

From the purifiers, with which we have occupied ourselves so long, the gas passes through the station metre, except in some works where that instrument is interdicted. At the Pancras station of the Imperial Company there is a single station meter, no longer used, and at the Hackney Road, and, we believe, at the Fulham Stations there is no station meter whatever. Neither is there one at the City Gasworks. The Imperial and the City companies measure their gas in the gas holders by noting the rise and fall, thus making the gas holders what they were originally called, gasometers, or measures of gas. Of course measurements by the holder would not be worth the paper on which they were recorded if gas were allowed to flow into and out of the holder at the same time. This we must suppose, therefore, is never permitted in the cases in question, although how Mr. Clark, at the Hackney road station, manages to separate the supply of the delivery from his monster holder, 200 ft. in diameter, 80 ft. high, and containing 2,500,000 odd cubic feet of gas, especially in winter and in foggy weather, is more than we can well understand.

We shall here dismiss the meters, partly because, in London, they are almost always made by Mr. Crosley or Mr. Parkinson, and although requiring a certain amount of attention from the gas engineer, are never planned and constructed and seldom repaired by him; and partially because to enter fully upon the subject of meters would occupy almost as much space as we can devote to all the other apparatus employed in gas making. To understand the various meters would require engravings, which, thus far, we have dispensed with. We may merely note here that the gas enters the meter at a considerably higher temperature than that at which it goes to the holders. At some of the gas works, as at the Horseferry road station, careful hourly observations of the temperature of the influent and effluent gas and of the air, and also, we believe, of the height of the barometer, have been made for a long series of years, and these afford perhaps one of the very best records of London weather extant.

From the meters the gas passes to the holders, which, as engineering constructions, are perhaps the most interesting of all the constituent portions of a great gas works. A gasholder may be compared to an enormous diving bell, rising and sinking in a great well of water, according to the quantity of gas let into or let out of the holder, through the inlet and outlet pipes entering the well at the bottom and rising above the surface of the water into the interior of the holder itself.

We cannot say exactly how many gasholders there are in London, but we are not far out of the way in stating their collective capacity as about 35,000,000 cubic feet, equal to the contents of a single holder 800 feet in diameter and 70 ft. high, or to sixteen holders 200 ft. in diameter and 70 ft. high, or sixty-four holders each 100 ft. in diameter and 70 ft. high. The Imperial Company take the lead in large gasholders, not only in London, but, thus far, in the whole world. The great holder at the Hackney road station is 201 ft. in diameter on the lower, and 198 ft. 6 in. on the upper lift, and "goes out" 80 ft., thus containing about 2,500,000 cubic feet of gas. There are a number of smaller holders at the same station, two of which are upwards of 100 ft. each in diameter. At the Fulham station of the same company there is one double lift or telescopic gasholder, 200 ft. in diameter and 64 ft. high, and among smaller holders, one of 160 ft. in diameter. At the Pancras station there are ten gasholders up and one in progress. The largest is 145 ft. diameter, and in a single lift of 55 ft. The one in progress is 134 ft. in diameter, and in a single lift of 55 ft. The ten holders already up contain, collectively, 3,326,000 cubic feet of gas, the largest holding 871,000 ft. and the smallest 80,000 feet.

In the preceding paragraph we have noted the two largest gasholders in the world, as far as the knowledge of English gas engineers extends. The Hackney road holder was erected in 1857, and that at Fulham, although constructed previously, was originally made with a single lift of about 40 ft. The largest gasholder in the world previous to 1857 was believed to be that of the Philadelphia, U. S. Gasworks, at the Point Breeze station in the suburbs of that city. This holder is 160 ft. in diameter and 95 ft. high, or nearly the height of the three lift holder of the City Gasworks, the highest in London. In both cases the height of the holder alone, exclusive of the columns, is that given as 95 ft. The Philadelphia holder was an extensive structure, the tank being laid in stone work, and carried up to enclose the whole of the holder, massive stone buttresses being erected on the outside.

The Phoenix Company have a holder the third in size in London; to wit: 160 ft. in diameter, 70 ft. in height, and containing 1,385,000 cubic feet. This was erected in 1856 at Kennington Oval. The company have other holders of modern size, both in Kennington lane and in Wellington street, Blackfriars.

The City Gasworks have eleven holders, one in three lifts, each 32 ft. 6 in. high, or 97 ft. 6 in. in all, the bottom lift being 82 ft. in diameter. The whole height of this holder is 105 ft., and its total capacity upwards of 450,000 cubic feet. Another holder is 100 ft. in diameter, but of moderate height, and the rest is much smaller.

The Chartered Company's holders are of moderate size, the largest, in Westminster, containing 620,000 cubic feet.

The Equitable Company have eleven holders, the largest 116 ft. in diameter and having two lifts of 33 ft. each.

The Commercial Company have four telescopic holders, two being 119 ft. in diameter, each, and 25 ft. high, while the others are 110 ft. each by 52 ft.

The Great Central Consumers' Company have four telescopic holders each 104 ft. in diameter and 50 ft. high, the capacity of each being 412,000 cubic feet.

The London Gasworks have, in addition to a number of small holders, two at Nine Elms, each 150 ft. in diameter and 60 ft. high, and

containing each about 1,000,000 cubic feet of gas.

The South Metropolitan Company have four gasholders up and another in progress. The largest erected is 100 ft. in diameter and 50 ft. high; that now going up is to be 110 ft. in diameter and 60 ft. high.

The Surrey Consumers' Company have six holders, the largest 108 ft. in diameter.

The Western Gas Works have three holders, the largest put up in 1859, and under Mr. Prichard's direction, being 150 ft. in diameter and 50 ft. high.

The Ratcliff Company's holders are of moderate size. We are unable just now to give the size of the holders of the Independent Company.

We must reserve, for a concluding article, the important subject of the construction of gasholders, as well as some general notes on the distribution of gas, the condition of the London gas companies, &c.

The dimensions, already given, of the great gasholders of London afford a strong contrast with those of the vessels first set up for the storage of gas. From a valuable paper on gasholders, read some years ago by Mr. Alfred Williams, before the Society of Engineers, it appears that the gasholder, or gasometer, constructed in 1803 by Mr. Murdoch at the Soho Works of Messrs. Boulton & Watt, was 8 ft. in diameter and 6 ft. high. Not long afterwards, when some progress was being made in the introduction of gas for lighting towns, Sir Humphrey Davy, who, notwithstanding his great genius, was the first to sneer at the most important applications of chemistry to the practical purposes of life, contemptuously asked Mr. Clegg if he intended to use the dome of St. Paul's for a gasholder. The latter, in replying that he hoped to see the day when such vessels would not be much smaller than the great dome, could hardly have foreseen how gasholders of even far greater bulk would ultimately be required. The dome of St. Paul's is 145 feet in external diameter, while already the Liverpool Gasworks are about to be enlarged by the construction of a gasholder 240 ft. in diameter, 70 ft. high, and containing upwards of 3,100,000 cubic feet of gas. For some years, too, the Imperial Company have contemplated the erection of a holder 300 feet in diameter.

For many years gasholders were regarded as dangerous, it being supposed either that gas was, by itself, explosive, or that it could become mixed in the holder with such a quantity of air as would render the combination explosive. It is now pretty well known that gas by itself is no more explosive than pump water, and it is evident that air cannot enter a vessel in which gas is compressed while its elasticity is greater than that of air. If a hole were knocked through the side of a gasholder gas would escape, but as long as the pressure, generally equal to 5 in. of water, was maintained no air could enter. But not long after the time (1813) when the Chartered Gasworks went into operation a deputation, headed by Sir J. Banks, visited them to report upon the apparatus used, and among other recommendations to Parliament, was one that the gasholders should not be made of a capacity greater than 6,000 cubic feet, and that they should be enclosed in strong brick buildings. The walls which formerly enclosed one of the earlier holders are still standing at the Horseferry road station. Mr. Clegg was one among the first, in the case of the Chester and the Birmingham Gasworks, to erect holders in the open air, and he did so in the face of much popular outcry against the supposed danger of such a practice.

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	65	48	\$	\$	\$	\$	\$	Sept. 30, 1880	Maryland Sterling Mortgage.....	3,000,000	5			
Baltimore and Ohio.....	Md.		380	13,111,800	10,781,833	566,070	3,922,203	2,305,788		" " " " " "	2,500,000	6	88	1825	
do do										" " " " " "	700,000	6	84	1820	
do do										" " " " " "	1,124,500	6	90	1875	
do do										" " " " " "	1,000,000	6		1867	
do Washington Branch.....	Md.	30		1,650,000						1st Mortgage.....	791,000	7	55	1866	
Bellefontaine and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	2d " " " "	160,000	7		1870	
do do															
Buffalo and State Line.....	N.Y. & Pa.	122 1/2	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,889	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	132 1/2	96	3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	367,000	6	100	1804	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7	62 1/2	1861	
do do										1st " " " "	800,000	7	80	1864	
do do										2d " " " "	800,000	7	64	1865	
do do										3d " " " "	950,000	7		1865	
do do										4th " " " "	1,365,800	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d " " " "	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,600,000	7			
do do										2d " " " "	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						3d " " " "	1,000,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,750	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	2d " " " "	200,000		41 1/2		
do do										1st Mortgage.....	1,250,000	7	80	Feb. & Aug.	
Chicago and Rock Island.....	Ills.	58 1/2	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	Gen'l 1st Mortgage.	3,600,000	7	58 1/2	Feb. & Aug.	
Chicago, Burlington and Quincy.....	"	80	138	4,689,340	4,814,515		1,514,428	761,830		2d " " " "	2,000,000	6	24	May 1.	
do do										1st Mortgage.....	2,000,000	7	105	1870	
do do										Cons. 1st Mort. S. F.	2,172,000	8	106 1/2	1863	
do do										" " " " " "	813,000	6	106 1/2	1890	
do do										1st Mort. Chi. & Aur.	399,000	7		1867	
do do										2d " " " "	363,000	7		1869	
do do										1st "Cent. Mil. Tract	392,000	7		1864	
do do										2d " " " "	245,000	8		1868	
Chicago, Iowa and Nebraska.....	Ind.	82		No report											
Cincinnati and Chicago Air Line.....	Ohio.	60		2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d " " " "	950,000	7	100	1880	
Cincinnati, Hamilton and Dayton.....	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d " " " "	532,000				
Cincinnati, Wilmington & Zanesville ..	Ohio.	68 1/2		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	3d " " " "	104,000				
do do										Income.....	303,500				
Cleveland and Mahoning	Ohio.	196		In hands of Receiver.	4,918,325	653,821				1st Mortgage.....	850,000	7	80		
do do										2d " " " "	469,000	7			
do do										3d " " " "	344,100	7			
Cleveland and Pittsburgh.....	Ohio & Pa.	116 1/2	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage M. L.	800,000	7	100	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7	91	1873	
do do										3d " " " "	1,165,000	7	80 1/2	1865	
do do										4th " " " "	1,154,000	7	61		
Cleveland and Toledo.....	Ohio.	48	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	Income.....	359,000	7	65	1867	
do do										1st Mort. Jun. 1st Div.	263,000	7	65	1872	
do do										1st " " " "	265,000	7		1862	
do do										2d " " " "	265,000	7		1863	
do do										1st " Tol. Nor. & Clev	521,000	7	75	1863	
do do										2d " " " "	293,300	7	75	1863	
do do										Junction Income..	44,500	7		1862	
do do										C. & T. Income.....	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	116 1/2	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	125	98 1/2	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	99	1861	
do do										2d " " " "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	87 1/2	54 1/2	1,490,000	290,700	50,500	See L. Miami.			Dividend.....	272,700		92	1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666	2,512,000	292,267	375,002	212,107		2d " " " "	2,212,000	8			
Dayton and Western.....	Ohio.	39		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000		50		
Detroit and Milwaukee.....	Mich.	186		No report						2d " " " "	2,500,000	7		1875	
do do											1,000,900	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	Ohio.	36		469,762	798,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Eaton and Hamilton.....	Ind.	132		986,061	1,219,100	249,668	124,140								
Evansville and Crawfordsville.....	Wis.			Operated by Galena & Chicago Union.											
Fox River Valley.....	Ills.	72 1/2	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	400,000		103	1862 & 1863	
Galena and Chicago Union.....	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	2d " " " "	180,000		100	May 1, 1875	
do do										1st Mortgage.....	1,993,000				
Great Western.....	Ills.									2d " " " "	1,520,000				
do do										1st Mortgage W. D.	1,041,000	10			
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report					1st " " " "	1,350,000	7			
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573	Sept. 1, 1860.	Land mortgage.....	5,000,000		26		
Hannibal and St. Joseph.....	Mo.	206		1,041,066	10,554,000	229,356	996,907	512,933	Aug. 31, 1861	Mortgage Conv.....	1,354,000	40			
do do										1st Mortgage.....	927,000	6		1873	
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Sept. 30, 1860	1st Mortgage.....	4,000,000	99		1869 & 1870	
Hudson River.....	N. Y.	48	144	3,758,466	9,107,000	182,106	2,047,145	778,121		2d " " " "	2,000,000	7		1860	
do do										3d " " " "	1,840,000	7		1875	
do do										Optional.....	38,000			1868	
Illinois Central.....	Ills.	63 1/2	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Construction.....	12,885,000	64		1875	
do do										" " " " " "	4,115,000	6	96	1875	
do do										Debentures.....	42,740				
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,900	Jan. 1, 1860.	1st Mortgage.....	601,000				
do do										2d " " " "	578,000	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,852	230,834		Income.....	38,700	10			
do do										1st Mortgage.....	500,000	7	85	1866	
do do										2d " " " "	400,000	7			
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort..	200,000	7			
do do										1st Mortgage.....	649,984	7	68		
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d " " " "	314,000				
Iron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	43,261	276,931	70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st ".....	289,000	7	75	1861	
do										2d ".....	392,000	7	70	1873	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st ".....	260,000	7			
do										2d " Conv.	1,000,000	7			
do										3d ".....	600,000	7			
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	903,000		89		
do										2d " E. D.	1,000,000				
do										1st Land Grant W D	4,000,000		21		
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report		June 30, 1861	1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.	29		514,433	130,000		103,914	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1863	
Little Miami.....	Ohio.	65					1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000				
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		245,910	98,679	June 30, 1861	1st Mortgage.....	243,000				
do										1st Mortgage.....	2,060,000	7			
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.	208		8,561,213	190,408	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868	
do										2d ".....	2,000,000	7			
do										3d ".....	1,500,000	7			
do										Sterling Income..	333,000				
Michigan Central.....	Mich.	68	284	6,057,784	7,968,489	125,000	2,136,699	910,169	May 31, 1861	Domestic.....	928,617				
do										1st Mortgage Sterling	467,483	6	98½	1872	
do										1st " Conv.	500,000	8	84	1869	
do										1st " unconv.	250,000	8	96	1860	
do										1st " Dollar Conv.	2,500,000	8	104½	1869	
do										1st " N. F. Conv.	4,153,000	8	106½	1862	
Michigan South'n & North'n Indiana	Mich.&	28½	246	9,018,300	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. So....	391,000		99	1860	
do										" Nor. Ind.....	985,000		103	1861	
do										" Goshen Line.	1,168,000		100½	1869	
do										S. F. Toledo.....	2,550,000			1885	
do										2d Mortgage.....	2,465,000		4½	1877	
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8			
do										2d ".....	200,000	8			
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	400,000	8			
do										2d ".....	600,000	8			
Milwaukee and Prairie du Chien.....	Wis.	27½	192	4,944,000	2,556,000		683,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	93	1891	
Milwaukee and Western.....	Wis.	71		No report											
Mississippi and Missouri.....	Iowa.	35		No report											
do										1st Mortgage Conv.	1,000,000	7			
do										2d " S. F.	400,000	8			
do										Oskaloosa Div....	1,425,000	7			
New Jersey.....	N. J.	13	34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Land Grant.....	7,000,000	7	102½		
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,386	Dec. 31, 1860	Mortgage.....	711,000				
New York and Erie Pref.....	N. Y.	66½		Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860	1st Mortgage.....	3,000,000		05		
do		36½								2d ".....	4,000,000		10½		
do										3d ".....	600,000		99		
do										4th ".....	4,500,000		86		
do										5th ".....	1,792,500		88½		
New York and Harlem Pref.....	Conn.	44	138	5,717,190	6,055,752		1,142,251	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	102½	1873	
do		18								2d ".....	1,000,000	7	101	1864	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7	94	Dec 1, 1866	
do										".....	972,000	6		Oct. 1, 1875	
New York Central.....	N. Y.	95½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,925,000	6	100½	May 1, 1883	
do										Mortgage.....	3,000,000	7	106½	June 15, 1884	
Northern Central.....	Md.	138		2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860	Construction.....	2,086,500	6		1885	
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	96,731	400,008	Nov. 1, 1860	State Loan.....	4,350,000	6			
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased	9,880,000	2,330,030	892,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500				
do										2d ".....	316,995				
do										Income.....	4,637,920				
Ohio and Mississippi, Western Div....	Ills.	148			3,292,403		No report			State Loan.....	7,000,000				
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W....	2,800,000	6			
do										Construction.....	4,500,000	6			
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,905,000	6	104½	1888	
do										2d ".....	2,319,000	6	98½	1875	
do										2d " Sterling.	1,957,410	5	89	1875	
Penn and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report			State Works.....	7,200,000				
Philadelphia, Wil. and Baltimore.....	Del.	98		5,600,000	2,310,000		1,236,397	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6	99½	1884	
do										Improvement.....	119,000	6		1863	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	1st Mort. O. & P..	1,000,000	7		1865	
do										2d ".....	750,000	7		1866	
do										1st " O. & L....	1,000,000	7		1872	
do										2d ".....	380,000	7		1873	
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000				
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.						
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856	
do										".....	997,000	7		1866	
do										".....	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.	125		848,778	1,285,200	132,063	195,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886	
Seneca and Hocking Valley.....	Ohio.	56		400,975	500,000	100,000	110,200	53,100							
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000				
do										2d ".....	450,000				
Steuensville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d ".....	900,000	7		1865	
Terre Haute, Alton and St. Lous....	Ills.	208		No report						1st Mortgage Conv.	1,000,000	7	100	1862	
do										2d " Conv.	2,000,000	7	85	1868 & 1870	
do										1st " Bel. & Ill.	517,000	7		1873	
Terre Haute and Richmond.....	Ind.	100	73	1,381,456	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	01	1866	
Toledo, Wabash and Western.....	Ohio & Ind	54	243	2,123,500	5,996,049	52,389	233,546			1st Mortgage.....	3,400,000	7		Aug. 1, 1865	
do										2d ".....	2,500,000	7		Nov. 1, 1878	
do										Mort. Coupons....	98,000	7		1860 to 1865	

Preparatory to the construction of a gas-holder, it is necessary to provide a tank of sufficient size for its reception, and to make the tank thoroughly water tight. The first tanks for holders of small size, were generally made of wood, and were the work of the brewers' vat makers, who guaranteed their duration for a term of years. Wood was not applicable, however, beyond a certain moderate size of tank, and the tanks are now always made of brick, stone or iron. In one case, at Chester, Mr. Clegg excavated a tank in solid rock.

Gasholders being now always made circular on account of that form containing the most gas with the least amount of iron in the sides, the tank is a circular pit, 2 ft. or more larger in its internal diameter, than the holder itself. The depth of the tank is about the same as that of the holder where the latter is in a single lift. The telescopic arrangement, now generally adopted for large holders, permits of the use of a tank of only one-half or one-third the depth of the holder, according as two or three lifts may be used. It is not customary to excavate the pit to the full depth over the whole surface of the bottom, the full depth being requisite only next the wall forming the tank. A large conical mass of earth, carefully puddled over with clay, is generally left in the centre of the tank, except in very marshy soil. This cone or "core" is useful also in supporting the top of the holder when all the gas is out. In firm blue clay it is not always necessary to puddle the surface of the cone, but otherwise from 18 in. to 2 ft. of good clay puddling is generally requisite. Occasionally, however, concrete and even brick-work is employed for facing the cone, while in some instances a hurdling or wattling of stakes and osiers is employed for the same purpose.

The tank wall must be of a strength dependent upon the nature of the ground, as well as upon the depth and diameter of the tank. At the Great Central Gasworks, the tanks, 105 ft. 9 in. in internal diameter and 26 ft. 6 in. deep, are 3½ bricks or 31½ in. thick at the bottom, exclusive of the spread of the footings, and fall of by three offsets of half a brick each to 18 in. at the top. The new tank at the South Metropolitan works, about 112 ft. in diameter and 31 ft. deep, in ground full of water, is 4½ bricks, or 40½ in. thick at the bottom, the wall being successively taken in, half a brick at a time, until a thickness of 18 in. is reached at the top. Heavy counterforts are also employed around the walls of nearly all gasholder tanks, these counterforts serving also to support the columns which retain the holder in place and guide it up and down. In some of the best made tanks three or four courses of brickwork above and below each set off are laid in cement, and hoop iron is applied as a band at each set off. The bricks always of a hard durable quality, should be laid, as far as possible, in continuous courses, strong hydraulic mortar being generally employed, although cement is sometimes used at an additional cost. The impervious facing of the cone should generally be continued under the footing of the brickwork and united to water tight backing of some kind, as clay puddle, around the outside of the wall. Stone or other supports should be built in at the bottom of the wall to take the edge of the holder when down.

Mr. Alfred Williams, who has had much experience of gasholder tanks, and gasholders, recommends a trial of concrete blocks in construction of the former. Such blocks have been successfully used in river walls, as at the Thames Ditton and Woolwich, and would cost hardly one-half as much as brickwork.

The tanks of the single lift holders at the Pancras station of the Imperial Company, are each 55 ft. deep. At the Hackney road station the tank of the great holder is 204 ft. in internal diameter and 41 ft. 6 in. deep, the wall being carried up in cement for its whole height. Upwards of 2,000,000 bricks 5,000 cubic feet of stone, were used in the construction of this tank. The site was that of a pond and the clay was about 35 ft. below the surface. The whole cost of the gasholder, including the tank, was upwards of £40,000 of which a large part must have been required for the tank alone. The large tank at Kennington oval, which cost not far from £15,000, has a tank about 162 ft. in diameter and 36 ft. deep, the cost of which was in round numbers, £6,000, the holder and columns costing about £9,000. Mr. Carroll's estimate for the Great Central tanks, already described, was £2,352 each, there being four placed close together.

[To be Continued.]

LOUISVILLE WATER-WORKS.

These works were commenced about six years ago, under the charge of a company of which A. Harris Esq is President, and T. R. Scowden, C. E., the Constructing Engineer. The basis of the company is furnished by the bonds of the city, which have been issued to the amount of \$956,000. Under the faithful management of these gentlemen, the works as completed represent a cost of \$825,759.

The following is a synopsis of the leading characteristic of the works:

Source.—The water is taken at a point on the Ohio River 1.52 miles above the city limits. A wrought-iron inlet-pipe 50 inches diameter, protected by a timber crib 32 by 70 feet by 12½ feet deep on the outer surface, is laid, with a mouth-piece 5 by 12 feet square, 1 foot below low-water line, to a point thirty feet from the engine-house, whence it branches to each engine-pump, retaining the same diameter, the pump suction being 200 feet from the inlet mouth.

Engine-House.—The superstructure is of brick, main building 47 by 56½ feet, two stories high, with a Corinthian portico; the boiler wings are each 32 by 56 feet, one story high. An engine and pump room is used, the pump-wells being 22 feet long, 8 feet wide, 8 feet 2 inches deep. An office, a blacksmith's shop, and store-rooms are provided in the building, and two coal-houses are built, 23 by 41 feet each. The chimneys are of brick, with a base and main shaft; the former octagonal, 12 feet wide, 16 feet high, the latter 114 feet high, with a circular 4 feet flue—121 feet total height. The character of these structures, as to solidity and ornament, may be gathered from the statement of cost.

Stand-pipe and Tower.—This consists in superstructure of a base, main shaft, lantern, and dome. Base of brick, with a circular Corinthian portico 38 feet 4 inches diameter. Main shaft of wood, 16 feet diameter at base, 12 at top, paneled and ornamented. Lantern 9 feet two inches inside diameter, 27 feet high, with 10 windows. Dome 6 feet radius, above it. Lantern-floor 173 feet above river low water. Stand-pipe, of boiler-iron, 48 inches diameter, is carried within 4 inches of the lantern-floor, a circular stairway being constructed around it, within the tower. It is provided with three 40-inch pump connections.

Pumping Engines.—Two single-acting engines are built: cylinders, 70 inches bore; stroke, 10 feet; plungers, 36 inches diameter; same stroke. Beams, double, each pair 42

tons; length, 31 feet 10 inches between end centers; extreme lift of pumps, 21 feet 10 inches; valves, double-beat; boilers—three single-flue 30 feet long, 6 feet drain, to each engine; grate surface, 22½ square feet; heating surface, 676 square feet to each; pumping capacity, at 10 strokes per minute, 7,560,000 per day, (U. S.) each engine. Performance, highest daily duty, by Cornish rule, 493,633 feet pounds per pound of coal; highest monthly average, 359,576 feet pounds; yearly average, 302,178 feet pounds; including in coal account the amount for starting fires.

Pump-Main, 30 inches diameter, 3650 feet long, with one check valve, and with 5 curves, respectively of 488, 150, 100, 100, and 19 feet radius. Discharge level, 144 feet above low water.

Reservoir, of earthwork, partly on an artificial embankment, 304 by 500 feet outside dimensions; slopes 1½ to 1, with a division bank; depth 19.4 feet; contents 7,100,000 gallons. Bottom paved with two flat courses of brick in cement; sides with four inch brick-work; bottom angles turned with arches, 9 inches thick, 6 feet high. No special puddle-walls or lining made, excepting in the embankment walls entire.

DISTRIBUTION.

Supply Main, 20 inches diameter.....	15,927 feet
Service " 16 " ".....	2,870 "
" " 10 " ".....	3,536 "
" " 8 " ".....	6,440 "
" " 6 " ".....	34,268 "
" " 4 " ".....	60,759 "
" " 3 " ".....	1,443 "

Total..... 132,033

Stop-Cocks, 20 inch.....	9
" 16 " ".....	6
" 10 " ".....	20
" 8 " ".....	21
" 6 " ".....	121
" 4 " ".....	270
" 3 " ".....	140

Total..... 587

COST OF WORKS.

Real Estate.....	\$44,928 64
Engine House etc.,.....	
Inlet Pipe.....	\$12,673 23
Caisson.....	9,633 57
Incidental.....	4,742 41
Engines, etc.,.....	117,754 64
Buildings.....	162,590 34
Stand Pipes, etc.,.....	31,286 68
Coal Houses etc.,.....	20,777 22
	305,057 18

Reservoir.....	\$74,535 37
Roads, Fences, etc.,.....	31,453 13
	105,984 50

Distribution, etc.,.....	
Pump Main.....	\$13,496 19
City Mains.....	230,832 84
Stop Cocks, etc.,.....	92,448 95
Boxes, etc., etc.,.....	20,846 61
	317,624 59

Contingents.....	55,850 90
Expenses to January 1st, 1861.....	1,379 14

Total.....	\$830,834 93
Less Credit.....	4,696 63
	\$826,138 42

MAINTENANCE FOR 1861.

Interest on \$956,000, at six per cent.....	\$56,360 00
Current expenses.....	11,338 00
	\$67,698 01
Annual Revenue.....	12,445 60
Deficit.....	\$55,252 41

☞ The Canal boat Lake Erie recently left Buffalo with a cargo of 7360 bushels of wheat. The weight of the wheat is 441,600, pounds, or over 220 tons. But notwithstanding her immense cargo, the Lake Erie drew less than the regular depth—5 feet 9 inches. The freight on her load at 16 cents per bushel, the price now paid, will bring \$1,104, and the clear profits on the round trip are stated at \$700

MONETARY AND COMMERCIAL.

There has been more or less of panic among bulls and bears of various sizes and capacities since our last weeks issue, relative to the proposed further issue of Treasury notes by the Government. Gold was run up in New York to 7 @ 7½ premium, and sterling exchange to 117, the *par* value of which is about 109. Government stocks, both General and State, made a similar advance of 3 @ 5 per cent. The Tribune of the 16th says:

"The market has been feverish for gold to-day, and the premium has fluctuated between 6½ @ 6¾ per cent. The demand appears to come mainly from shorts, and the foreign bankers generally have little confidence in a high rate of premium being sustained at present. At to-day's quotation the supplies came freely. At the close the rate was about 6½ per cent. The deposits of demand notes for conversion into 6 per cents 5.20 to-day exceeded \$400,000, but the deposits on temporary loan were small. The market is a little dull for Indebtedness Certificates, and the quotation is ¾ @ ¾ per cent premium. The "gold" demand notes are in large demand and firm at 103½ @ 103¾. The quotation, of course, is governed, to a considerable extent, by the movement in gold. In 7.30s there is less doing, and the quotation receded to 105½. There is more activity in money on demand, and 5 per cent has been paid in some cases. The leading stock houses, however, continue to supply their wants at 4 per cent, and loans are still occasionally made at 3 per cent. In paper there is no change to notice."

The call for money although but slightly more active than a week ago, combined with a decrease in the volume of currency, gave the money market a little more the appearance of activity. There is, however, a continued demand for first class paper at 6 @ 8 for 60 day paper, and from 8 @ 10 for such paper as has 90 days to run.

The Exchange market is dull and rates a shade lower. Quotations are:

	BUYING.	SELLING.
New York,.....	½ dis. @ par.	½ prem.
Boston.....	½ dis. @ par.	½ prem.
Philadelphia,.....	½ dis. @ par.	½ prem.
Baltimore,.....	½ dis. @ par.	½ prem.
Gold,.....	5½ prem.	6 @ 6½ prem.
Silver,.....	2 prem.	3 prem.

Relative to the condition of the New York stock market the Tribune says "there was a fair demand for Government securities at morning prices. The bidding was active for Railroad Bonds, but the firmness of holders checked sales. Fort Wayne Firsts sold at 98—an advance of ½ per cent. on Saturday, and the Seconds at 82. Erie Thirds were 99½; Chicago & Northern Assented 47; Illinois Central 97½, etc. At the close, late in the day, the quotations were: United States 6s, 1881, Registered, 103½ @ 103¾; United States 6s, 1881, Coupons, 106½ @ 106¾; United States Treasury Notes, 6 3-10, 105½ @ 106; Tennessee State 6s, — @ 60; Missouri 6s, 52 @ 52½; Pacific Mail Steamship Company, 116½ @ 117½;

New York Central Railroad, 95½ @ 95¾; Erie Railway, 38½ @ 38¾; Erie Railway Preferred, 66½ @ 66¾; Hudson River Railroad, 48 @ —; Harlem Railroad, 18 @ 18½; Harlem Railroad Preferred, 44 @ —; Reading Railroad, 58 @ —; Michigan Central Railroad, 68 @ 68; Michigan Southern & Northern Indiana Railroad, 28½ @ 28¾; Michigan Southern & Northern Indiana Guaranteed, 63½ @ 64; Panama Railroad, 137½ @ 138½; Illinois Central Railroad, 63½ @ 63¾; Galena & Chicago Railroad, 72½ @ 72¾; Cleveland & Toledo Railroad, 48 @ 48; Chicago & Rock Island Railroad, 68½ @ 68¾; Milwaukee & Prairie du Chien Railroad, 34½ @ 34¾; American Gold, 106½ @ —.

The Boston & Worcester Railroad Company has declared a semi-annual dividend of 4 per cent.

The Michigan Central Railroad has declared a dividend of 3 per cent, payable about the 1st July.

The earnings of the Norwich and Worcester Railroad for the month of May have been as follows:

Passengers.....	\$7,642 38	\$9,009 39
Freight.....	16,218 10	18,088 61
Total.....	23,860 48	27,097 90
Gain on 1861.....		3,237 42

The following extract from the report of the directors shows the business of the Chicago and Rock Island Railroad for the nine months ending March 31:

Earnings from Passengers.....	\$254,071 12
Earnings from Freight.....	757,144 47
Earnings from Mails, &c.....	43,488 81
Total.....	\$1,054,704 40
An increase over the corresponding months of last year of \$160,019 25.	
Expenses the same time (nine months) including extraordinary repairs.....	531,386 86
Leaving net earnings.....	\$523,317 54
Cost of New Works.....	\$35,873 12
Taxes.....	11,408 84
Legal Expenses.....	2,207 19
Interest for nine months on bonds.....	73,132 50
Rent on Peoria Road.....	93,750 00
Balance.....	\$306,963 89

There has been expended upon the road, which is properly chargeable to construction, \$43,186 17. Of this amount, 7,311 05 is included in the items of repairs; the remainder, \$35,875 12, is put down as the cost of new works. The road earned the 1st week in June, 1861, \$24,752; do. 1862, \$26,535. Increase, \$1,783.

The May earnings of the Cleveland and Toledo Road were over \$5,000 in advance of 1861. The Toledo road earned in its last fiscal year \$1,003,639.

The State of Indiana will pay the 1st of July interest in New York on the public debt in gold. The official notice of the Treasurer of Illinois does not specify gold, but as the taxes for the support of the public debt are collected in gold, the impression is that the payments here on the 1st July will be made by the American Exchange Bank in kind. Ohio has already provided gold for her interest. Massachusetts and New York pay in gold, and we hear nothing to the contrary in reference to Connecticut or Kentucky.

The Chemung Railroad will pay 2 per cent

quarterly dividend at the Park Fire Insurance Office, No. 237 Broadway, on demand.

The interest on the Iowa State debt will be paid by Gilman, Son & Co., No. 47 Exchange place, on 1st of July.

The Minnesota Mining Company declares a semi-annual dividend of \$5 per share; or 10 per cent on the capital stock, from the net earnings of 1861, payable after the 7th of July.

We annex a comparative statement of the Exports (exclusive of specie) from the Port of New York to foreign ports for the week ending June 10, and since Jan. 1:

	1860.	1861.	1862.
For the week.....	\$1,871,727	\$2,520,013	\$2,266,400
Previously reported	36,033,879	55,391,477	52,218,660

Since Jan. 1...\$37,910,606 \$57,911,490 \$54,485,160

Our export tables show a great increase over the corresponding period in 1860, and nearly equal to those of last year.

The Erie Canal receipts of flour and grain since the opening of navigation, on the 1st of May, show the following results, compared with last year and the year before:

	1860.	1861.	1862.
Canals opened.....	April 25.	May 1.	May 1.
Flour, bbls.....	175,520	111,486	185,191
Wheat, bush.....	1,008,084	3,985,497	5,268,085
Corn.....	2,996,744	2,824,051	1,977,617
Barley.....	73,013	99,645	317,617
Oats.....	1,725,198	838,240	548,029
Rye.....	38,683	36,583	195,240

The earnings of the Galena & Chicago Union Railroad Company for the first week of June were as follows, compared with 1861:

	1862.	1861.	
Freight.....	\$36,702 40	\$37,310 00	Decr. \$607 60
Passengers.....	7,709 25	7,664 84	Incr. 24 41
Mails, etc.....	1,250 00	1,100 00	Incr. 150 00

Total.....\$45,661 65 \$46,074 84 Decr. \$413 19

The Milwaukee & Mississippi (Prairie du Chien) receipts were:

For the month of May,.....	\$130,211
Against May, last year,.....	112,205

Increase this season,.....\$17,946

The Pittsburgh, Fort Wayne & Chicago Road earned—

The first four months of 1862,.....	\$1,146,300
Net.....	496,000

Equal to interest on its bonds and 10 per cent on its stock. The bids of the day been at 96½.

The receipts of the Toledo & Wabash Railroad for the first week in June have been as follows:

	1861.	1862.
Passengers.....	\$3,447 70	\$5,041 30
Freight.....	14,710 62	17,341 75

Total.....\$18,158 32 \$22,383 05
Increase.....\$4,224 73

The earnings of the St. Louis, Alton & Chicago Railroad for the same week were:

	1862.	1861.
Passengers.....	\$3,299 90	\$5,774 90
Freight.....	12,761 58	10,002 67
Sundries.....	815 33	815 33

Total.....\$18,776 81 \$16,592 90
Increase in 1862.....\$2,183 91

Total, this month to date,.....18,876 93 16,592 90

Total since Jan. 1st.....\$455,160 04 \$392,713 94

The earnings of the Dayton & Michigan Railroad for the year ending April, 1st, 1862, were:

1862.....	\$400,168 37
1861.....	370,002 59

Increase.....\$29,165 78

The company has recently erected grain elevators, which have had a favorable influence on the business of the road, as the receipts of April and May show an increase of about \$6,000 over the corresponding months of last year.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:30 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day, Toledo & Day, Huntsville.....	5:20 P. M.	10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Terre Haute and Lafayette and Chicago Mail.....	5:05 A. M.	11:10 A. M.
Indianapolis and Chicago Night Express.....	3:20 P. M.	11:50 P. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

ns run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
nsville and St. Louis Mail.....	5:00 A. M.	10:45 P. M.
ymour Accommodation.....	3:00 P. M.	8:45 A. M.
nsville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

P. W. STRADER.
General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

W. H. L. NOBLE.
General Ticket Agent Indianapolis & Cincinnati Railroad.
E. F. FULLER.
General Ticket Agent Ohio & Mississippi R. R.

McCALLUM, BRISTOL & CO., BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct **McCALLUM'S PATENT INFLEXIBLE ARCHED TRUSS BRIDGE**, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge and in the most approved and perfect manner. Parties desiring information, will please apply to the firm at their office 99 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y. Ag. 26.

MIDDLETON & STROBRIDGE, LITHOGRAPHERS AND ENGRAVERS.

Walnut St., CINCINNATI.

Special attention given to all kinds of work in our line, such as Show Cards in one or more colors, Maps, Bonds, Portraits, Certificates of Stock, &c., &c.

J. T. CRAPSEY,
ATTORNEY AT LAW,
OFFICE:
N. W. Cor. Walnut & Sixth streets,
my21 CINCINNATI

ERIE RAILWAY.
Great Broad Gauge, Double Track
and Telegraph Route
TO
NEW YORK, BOSTON,
AND ALL EASTERN CITIES,
CARRYING THE
Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DONLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

feb.6. CHARLES MINOT, Gen'l Sup't

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for

Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition, The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

THIS IS THE ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wes. Ag't, Baltimore, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

CHICAGO; GREAT WESTERN AND NORTH-WESTERN LINE—INDIANA- POLIS AND CINCINNATI SHORT-LINE



SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M., Lafayette at 9:15 P. M., Springfield at 5:20 A. M., Quincy at 12:55 P. M., Palmyra at 2:15 P. M., St. Joseph at 12:30 A. M., Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M., Lafayette at 1:40 A. M. Chicago at 6:00 A. M., connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

KNOX & SHAIN,
Engineering and Telegraphic
INSTRUMENT MAKERS,
218 WALNUT ST., PHILADELPHIA.
(Two Premiums by Franklin Institute.)

OHIO & MISSISSIPPI RAILROAD, CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

TWO DAILY TRAINS FOR VINCENNES, Cairo, and St. Louis.

Mail Train leaves Cincinnati at 7:00 A. M., arrives at East St. Louis at 11:30 P. M.

Express Train leaves Cincinnati at 7:20 P. M., arrives at East St. Louis at 12 M.

Two Daily Trains for Louisville, at 7:00 A. M., and 7:20 P. M.

Sunday Evening Express 7:00 P. M.

The trains connect at St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 7:20 P. M.

RETURNING.—Mail Train Leaves East St. Louis.—(Sundays excepted) at 6:40 A. M., arriving at Cincinnati at 10:00 P. M.

EXPRESS TRAIN.—Leaves East St. Louis daily at 4:45 P. M. arriving at Cincinnati at 8:00 A. M.

FOR THROUGH TICKETS

To all points West and South, please apply at the office, No. 5 East Third street; No. 1 Burnet House, corner of north-west corner of Front and Broadway; Spencer House Office; and at the Depot corner of Front and Mill Streets.

G. B. McCLELLAN, Gen'l Superintendent.

Omnibuses call for Passengers, November 11th, 1861.

1861. 1861
FAST TIME.
—
LITTLE MIAMI
—AND—
COLUMBUS AND XENIA
—AND—
CINCINNATI, HAMILTON & DAYTON

RAILROADS.

On and after SUNDAY, Nov. 10. 1861, Trains depart as follows:

7:30 A. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express.—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation.—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation.—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Richmond, Indianapolis and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation.—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express.—From Cincinnati, Hamilton and Dayton Depot.—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,

General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St, bet Walnut & Vine
CINCINNATI O

W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of
O. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that pains will be spared to give entire satisfaction in all cases.

1862. 1862.
Pennsylvania Central R. R.
285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH to PHILADELPHIA
(with close connections from Western Cities,
ALL CONNECTING DIRECT TO NEW YORK.

THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
ONE TRAIN RUNS DAILY (430 MILES,) VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.
ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "PA. PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburgh.

CLARKE & CO., Transfer Agents, Pittsburgh.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

W. W. AIKMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.

CLARKE & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

G. B. NEAL, Parkersburg, Virginia.

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H. S. PIERCE & CO., Zanesville, Ohio.

MCDOWELL & MCNEELY, Portsmouth, Ohio.

R. MCNEELY, Maysville, Ky.

J. P. JOHNSTON, Ripley, Ohio.

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R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
L. H. HOUSTON, Gen'l Ticket Agent, Philadelphia.
H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

BUSH & LOBDELL.
Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,
MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the

Most Reasonable Terms.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

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MACHINERY,

OF EVERY DESCRIPTION.

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ALBERT BRIDGES.

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Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

through Distance 280 Miles;

42 Miles Shorter than any other Route
NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M., 3:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without rebilling or transhipment.

JOHN BRANT, JR., Superintendent

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent.

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FOR 1861

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THE NAMES AND RESIDENCES

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PRESIDENTS, DIRECTORS

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OFFICERS

OF ALL THE RAILROADS IN THE

UNITED STATES

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M. W. BALDWIN & CO. ENGINEER'S

BROAD AND HAMILTON ST.

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Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotives. B. S. e-u 419 y

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned

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EDWIN J. HORNER,

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WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

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We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE ON BOTH SIDES, impossible to unravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.

Feb 12.

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Drawing Instruments, Scales of all Kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

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JAMES FOSTER, Jr.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.: Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase Ag. 4, m. 6.

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Bar of all Sizes,

And all Forgings for Railroad Machinery.

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LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING

LOCOMOTIVE ENGINES

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Railroad Machinery, Tires, etc.

-AND ALSO TO-

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, President.

WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

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Wrought Iron Welded Tubes—from ½ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas, Water, or other purposes, and fittings of every kind to suit the same.

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S. F. M. TASKER,

HY. G. MORRIS.

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In use by 10,000 Merchants, Bankers and Railroad officers of the South and West. For sale by 1,000 leading Stationers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, JUNE 26, 1862.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
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—•—

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“ “ six months.....	110 00
“ “ per annum.....	200 00
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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	10.10 A. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	5.40 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.10 A. M.
Marietta & Cincinnati—		
Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.
Ohio & Mississippi—		
Mail.....	5.05 A. M.	10.05 P. M.
Seymour Accommodation.....	3.00 P. M.	8.45 A. M.
Express.....	5.00 P. M.	6.53 A. M.
Indianapolis & Cincinnati—		
Mail.....	5.05 A. M.	11.10 A. M.
Chicago Express.....	3.20 P. M.	11.50 P. M.
Dayton & Michigan—		
Toledo, Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	3.20 P. M.	10.10 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.
Kentucky Central— (City time.)		
First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.
The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.		
Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.		

A NATIONAL CURRENCY.

One, and not the least, of the results to flow from the present war, is that of giving the country a national currency. The writer has heard large capitalists in New York frequently make the assertion, that if we gained nothing else from the war than the restoration of the government and the national currency furnished by the issue of Treasury Notes, we would be amply remunerated for all our expenditures of blood and treasure. This is going a good way—especially for old anti-United States bank Democrats; but we think it safe to say, that the benefits that are likely to result to the country from the possession of a sound currency—at par in all parts of the country, and as safe as the General Government—can not be very readily overestimated.

Timid persons, bank-note brokers, money-shavers and others of the stripe who live on the fluctuations of currency, have expressed great fears at what they are pleased to call an “inflation of the currency” by the issuance of Treasury Notes. We presume no arguments, however sound, would have any weight with these persons; for they confound their own diminution of profits with the welfare of the country—forgetting that their loss is the people’s gain. Then, too, many persons look upon Treasury Notes in the same light as they do on bank notes. They should not be so regarded. Treasury Notes, while legal tender, are the same as gold for all practical purposes; while bank notes are but representatives of individual credit, and are put into circulation generally by means of loans. Treasury Notes add to the *real capital* of the country. Bank notes only augment the *credits* of individuals, and tend directly to speculation. It may be urged that in the present system of banking, bank notes, in addition to individual responsibility, have the security of Government or State stocks. That may be true, but the ultimate security is the Government after all, and if Government fails, banks will also fail. So, any way you can fix it, Treasury Notes at the *worst* are as secure as bank notes, and have the great advantage of being available at par all over the country, and of being good beyond a doubt, while the Government lasts. We are glad, therefore, to notice the call of Secretary Chase, upon Congress, for an additional \$150,000,000 of “Green Backs,” or *Lincoln Greens*, as Treasury Notes are now facetiously called “down in Dixie.”

The condition of the Treasury issues, under the several acts of Congress, is thus stated by the Secretary:

The act of July 17, 1861, authorized the issue of \$50,000,000 in U. S. Notes, payable on demand, and receivable for customs. This authority was enlarged under the act of Feb. 12, 1862, by the addition of \$10,000,000—making \$60,000,000 in all. * * *

The act of Feb. 25, 1862, authorized the

issue of \$150,000,000 in United States notes, provided, however, that the demand notes under former acts should be retired and cancelled as rapidly as practicable, and that the aggregate of such notes and of the United States notes to be issued under this act should at no time exceed \$150,000,000. All the notes to be issued were made a legal tender, but none, except the demand notes, were made receivable for customs.

Under these laws, \$60,000,000 in demand notes, receivable for customs, have been issued, and \$90,000,000 in notes not so receivable. The aggregate now outstanding is, therefore, \$150,000,000, being the whole amount authorized by law.

Of this aggregate about \$6,500,000 in Demand Notes are held by banks and capitalists, and not used in circulation, being held at a premium in consequence of their receivability for customs of from $\frac{3}{4}$ to $\frac{1}{2}$ per cent., and about \$3,500,000 are held in the Treasury for circulation.

The whole issue of \$60,000,000 in demand notes may thus be regarded as practically withdrawn from circulation. This withdrawal leaves only the issue of \$90,000,000 of United States notes not receivable for customs, increased gradually by the substitution of these notes for demand notes cancelled, from which conversion into bonds redeemable after five years, and payable in twenty years, called for convenience, five twenties can be expected to be made.

With this state of affairs the Secretary asks for the privilege of issuing an additional hundred and fifty millions legal tender notes, and recommends that a portion of them be of less denomination than \$5. In this connection the Secretary very justly remarks:

I am aware of the general objections to the issue of notes under \$5, and concede their cogency. Indeed under ordinary circumstances they are unanswerable, but in the existing circumstances of the country they lose most if not all their force. The country is involved in the expenditures of a contest for national existence, and it is highly desirable that the burdens of the people be made as tolerable as possible.

If the restriction on the issue of small denomination be removed the wants of the country will absorb a circulation of \$25,000,000, and perhaps more. The interest on this circulation, say \$1,500,000 a year, will be saved to the tax-payers.

Payments to public creditors, and especially to soldiers, now require large amounts of money to satisfy fractional demands less than \$5. Great inconveniences in payment of the troops are thus occasioned. With every effort on the part of the Treasury to provide the necessary amount of coin, it is found impracticable always to satisfy their demands.

When the amount required is furnished the temptation to disbursing officers to exchange it for any small bank-notes that the soldiers or the public creditors will take is too great to be always resisted. And even when the coin reaches the creditors it is seldom held, but passes, in general, immediately into the hands of sutlers and others, and disappears at once from circulation. The inconveniences, therefore, to the Government and creditors, from the absence of United States notes of small denominations, are not compensated for by anybody.

It may properly be further observed that, since the U. S. Notes are made legal tender and maintained nearly at the par of gold by the provision for the conversion into bonds,

bearing six per cent. interest payable in coin, it is not easy to see why small notes may not be issued as safely as large ones.

The notes made a legal tender circulate as money, and the Government may authenticate by device and imprint small notes, as will as small coins. The limit is to be found only in public convenience, which it dictates denominations in notes similar to denominations on gold, leaving the small circulation of silver (less valuable than gold) as before.

Another consideration which deserves to be taken in the account is this, that [presumption of payments in specie can be more certainly and easily effected, and with far less of inconvenience and loss to the community if the currency, small as well as large, is of United States notes, than if the channels of circulation are left to be filled up by the emissions of nonspecie paying corporations, solvent and insolvent.

These considerations of economy, of public advantage, and of private convenience seem to me to justify fully the removal of the restriction upon the issue of small notes.

These arguments of the Secretary seem sound and convincing, and we can see no objections to the small note project being carried out.

In addition to the issue of notes, the Secretary asks for an extension of the deposit law—a law that has been found to work well, and which is likely to continue to work well in the future. The act limited the deposits to fifty millions and the rate of interest to five per cent., which was subsequently reduced to four. The deposits at five per cent. have reached fifty millions, and are expected greatly to increase if the restrictions are removed. The Secretary says:

Payments will, of course, be frequently required, but the pressure must be very great which will reduce the receipts below them, while, in ordinary times, the latter will constantly exceed the former.

It may indeed become practicable to reduce the rate of interest even below 4 per cent. with advantage. Whatever the rate allowed, the average excess of deposits above reimbursements will constitute a loan to the Government at that rate. In order to retain the average excess at its maximum, it may be well to provide by law, that of the United States notes hereafter authorized to be issued, there shall be always reserved in the Treasury, or from issue, an amount not less than one-third the amount deposited.

Such a provision would make the Treasury the best of Saving's Banks, and by its guarantee of prompt payment under all circumstances insure the highest confidence, and augment to its maximum the flow of deposits. I estimate the amount of loan likely to be made to the Government at four per cent. or less in this form at not less than \$30,000,000 in addition to the \$50,000,000 already deposited.

In the Secretary's estimate of deposits, we think he is *below* rather than *above* the amount that will be deposited. The average deposits in the New York City banks alone exceed 150 millions. A large part of this money is in bank awaiting investment, and generally without interest. Of course all such would go at once to the U. S. Treasury, where it would be always equally available for in-

vestment, while drawing a fair rate of interest.

The Secretary also proposes the engraving and printing of all Treasury Notes in the Department at Washington, whereby a large expenditure *might* be saved, and additional guarantees against frauds be secured.

It will be seen on examination of the above that the war has given us, *ex necessitate rei*, a National Bank and a national currency, without the machinery of bank Presidents and Directors to be turned into "political powers," whenever their interests were affected, or they had any interests to subserve—and has thus cut the great political knot that the Hero of New Orleans and his kitchen cabinet tied around the neck of the old whig party, in 1832, and which finally was the cause of its death a quarter of a century afterward.

Since the above was written, the Treasury Note bill has passed both houses, and is now a law.

IRON WAR VESSELS.—This subject is now attracting the attention of the whole world, our own government having assumed the lead. No pains or expense should be spared in perfecting the science of building war vessels, and government we trust will manifest due liberality in making all the tests possible, to fully develop the best material and best plans of construction that the science or ingenuity of the times may bring forward.

The New York Tribune says one of our most enterprising ship builders is now constructing two war steamers for the Italian Government, to be iron plated. The same authority remarks it is to be regretted that we have not at this time a national foundry, where the tensile strength of the plates to be used for these vessels could be fairly tested, and where a series of experiments might be made to determine the fact whether they are really ball and bomb proof or not.

We believe that no one doubts that we have an iron in America that equals the far-famed Dannemora of Sweden, which is monopolized by a few wealthy English manufacturers, and costs about three times the price of the best of English bars. The Swedish ore is magnetic, and the analysis made by Bergman shows that it contains a large per centage of manganese. The Franklinite ore of New Jersey is also magnetic, and also has 16 per cent of manganese.

Dr. Hayes, State Assayer of Massachusetts, in reference to the Pig Franklinite Metal says, "that no trace of sulphur was found. The pure iron, 93,664; manganese, 3,204; carbon, 2,250; silica, alumina, ore, lime, 1,050. The mechanical and chemical constitution of this iron point to great ease in working it into malleable iron, both the manganese and carbon are readily oxidized by the puddling, while the pure iron takes the form of tough or malleable iron readily. It is also the kind of metal required for manufacturing steel by fusion, losing in the operation a portion of carbon and all its metallic manganese.

CHICAGO, IOWA & NEBRASKA RAILROAD.—At a stockholders' meeting of this road at Clinton, June 12th, the following officers were appointed for the ensuing year:—John Bertram, President, Salem, Mass.; L. A. Crocker, Vice-President, Oswego, N. Y.; H. Williams, Resident Director, Clinton, Iowa; C. A. Lombard, Treasurer, Boston, Mass.; Jas. M. How, Secretary, Clinton, Iowa; C. N. Bodfish, Superintendent, Clinton, Iowa.

PIKE COUNTY RAILROAD.—At the annual meeting of the stockholders of this company held recently at Barry, Ill., the following gentlemen were chosen Directors:—A. Starn, James McWilliams, Griggsville; O. M. Hatch, Springfield; B. D. Brown, George Wicks, Barry; J. B. Helm, G. W. Shields, Josiah Hunt, B. N. Crumps, Hannibal.

At a subsequent meeting of the Directors, Mayor Josiah Hunt of Hannibal was chosen President, and Josiah Lombard, Esq., Secretary and Treasurer.

CEDAR RAPIDS & MISSISSIPPI RIVER RAILROAD.—At a meeting of the stockholders of this road, held at Cedar Rapids, Iowa, on the 11th inst., a new Board of Directors was appointed and the following officers elected for the ensuing year:—L. B. Crocker, President, Oswego, N. Y.; G. M. Woodbury, Vice-President, Marshalltown, Iowa; C. A. Lombard, Treasurer, Boston, Mass.; W. W. Walker, Chief Engineer, Cedar Rapids; L. S. Pardee, Secretary, Grand Rapids.

GREAT WESTERN (CA.) RAILWAY.

REPORT OF THE DIRECTORS.

The receipts on capital account during the last half year amounted to £5,202 17s. 9d. making the total receipts on 31st January, 1862, £5,218 300 5s.

The expenditure now amounts to £5,019,662 12s. 6d. This includes the extra cost of renewing wooden bridges in stone and iron and the expenditure incurred in fish-jointing eight and a half miles of rails renewed during the half year. There are still ninety and a half miles of the main line to "fish-joint," and the expense of this, as it is hereafter incurred, will be charged to capital.

It also includes a sum of £14,618 9s. 4d., which, it will be observed, has now been charged to capital as "loss on value of rails in stock." These rails form the residue of those purchased when the road was first made; a very large portion of them were used by the contractors in the construction of the line, and also in completing its ballasting during several years after the railway was opened. The rails in this way became damaged in value, but the stock has now been estimated by Mr. Reid, at its present market price in Canada, much below the figure at which the rails were originally purchased, with the duty and other charges upon them.

It should be mentioned that the rails that have hitherto been supplied for the maintenance of the road out of this stock have only been charged to revenue at their proper value.

The sum of £8,219 3s. 6d., advanced the Port Huron and Milwaukee Railway 1858, hitherto included in the balance-sh

under the head of "Sundry Accounts due to the Company," has also been charged to capital.

The balance at the credit of capital account is, therefore, £198,637 12s. 7d.

With reference to the charges against capital, it may be observed that during the last two years no less than five additional locomotive engines, with their tenders, have been built at the company's workshops and paid for out of revenue, as well as in accordance with the last report, the cost of fish-jointing ninety six and a quarter miles of road amounting in all to £11,762 0s. 3d.

The revenue account for the half year ending 31st January, 1862, shows the following results:

Gross Receipts.....	£265,951 11 11	
Working expenses, including maintenance, taxes, insurance, and rent of suspension bridge.....	125,424 17 10	
Balance.....	£140,526 14 1	
From which there has to be deducted—		
Interest on Government loan.....	£17,498 5 0	
Interest on Company's bonds.....	36,755 9 3	
Renewals of rails, sleepers, bridges, etc.....	27,445 15 4	
Flamborough accident account.....	882 11 8	
Balance of bad debt account.....	3,700 5 6	
	87,249 6 9	
Leaving the balance from the half-year's working of. Out of which the directors recommend the payment of a dividend at the rate of 3 per cent. per annum, which will absorb.....	£33,577 7 4	
	50,142 14 3	
	£3,134 13 1	
To this has been added the surplus from last half-year.	18,373 0 6	
Balance.....	£21,507 13 7	
From this balance the directors have written off the sum of £7,453 7s. 3d., being one third of the arrears of interest amounting to £22,350 1s. 4d. hitherto standing in the balance sheet against the Detroit and Milwaukee Company.....	7,453 7 1	
Leaving to be carried forward to next half-year's account the sum of.....	£14,540 6 6	

The following statement shows the traffic and working expenses for the last four half-years:

RECEIPTS.				
Half-year.	Passengers and mails.	Goods and live stock.	Rents.	Total.
July, 1860.....	£98,808	£91,528	£894	£191,230
Jan., 1861.....	123,251	128,619	913	252,820
July, 1861.....	95,771	112,000	744	209,315
Jan., 1862.....	104,167	161,069	714	265,950
Expenses—including taxes, insurance and suspension-bridge rent.				
July, 1860.....				£114,260
Jan., 1861.....				121,406
July, 1861.....				129,616
Jan., 1862.....				125,324

The working expenses of the last half-year are at the rate of 47.16 per cent. and for the whole year 54½ per cent.

The war in America in the early part of the half-year greatly affected trade and disturbed railway traffic, but after the close of navigation a large quantity of freight, which before the war used to go down the Mississippi, was turned in the direction of the Atlantic, and very largely benefitted the traffic of this and other parallel lines.

The suspension of specie payments in the United States has caused considerable embarrassment in converting American currency into negotiable funds, but the Executive in Canada have exerted themselves most efficiently in counteracting this inconvenience; and the whole loss from this source, including that from the unavoidable rise in ex-

change on the remittances for England and other similar causes, is under £1,800 for the half-year. There are also some balances due from Southern railways, not likely now to be recovered, to the amount of £145 13s. 9d. of bad debts. The whole of these sums have been charged against the revenue of the past half-year.

The receipts of the Detroit and Milwaukee line have very satisfactorily increased during the winter, and the traffic brought upon the Great Western Railway by that line is estimated to amount during the past half-year to £25,508 10s. 9d., as against £23,765 19s. 1d. for the corresponding six months of 1860.

The result of the working of the Detroit and Milwaukee Railroad during the year 1861 was that, within £2,500, it earned sufficient to have provided (but for the debts specially ordered by the court to be paid) for the payment of interest upon the whole of the bonded debt of that company.

The anticipations respecting the importance of the earth oil district as a source of fresh traffic seem likely to be realized, and the plank road to Wyoming Station to Bear Creek being found totally inadequate to accommodate the business, the directors request the sanction of the proprietors to an outlay of about £10,000, which would be sufficient, as they are informed, to provide a rough rail or tram-way sufficient to meet the present requirements of the district and prevent the trade taking another channel.

The directors have to record with regret the loss by fire of the corn elevator and grain warehouse at Hamilton on the 18th of February. The loss in money will be defrayed by the insurance fund, but until its reconstruction inconvenience must of course arise to the grain traffic, though this is fortunately alleviated by the auxiliary elevator which the company possess at Hamilton Wharf. A new elevator, to replace that destroyed, will be completed by the 14th of June at a cost of £4,600.

The directors have to report that the Commercial Bank of Canada continue to proceed with their suit in the court of Michigan, alluded to in the last report.

The bank has also commenced another action in Canada against the Great Western Company, but the directors are assured by their legal advisers that the bank has no prospect whatever of success in either suit; as, however, the matter is now before the courts of law, any discussion of the merits of the case is obviously impolitic and to be deprecated.

The directors have much satisfaction in stating that an agreement was entered into by them with the directors of the Grand Trunk Railway Company on the 31st of January, subject to the sanction of the proprietors of both Companies for securing the advantages of economy and unity of interest to both concerns, by placing the whole under one management, with a fusion of all receipts. This agreement, however, requires that in the first instance permissive powers be given by the Canadian Legislature, and it is expected that the bill now before it for that purpose will be in committee by the middle of May. So soon as the fate of the bill is decided, a special meeting of the proprietors will be convened. Some of the details of the arrangements are not yet complete. The directors therefore trust that the proprietors will permit them to abstain from entering at present into farther particulars upon this most important subject until such special meeting is called for its consideration, when

they will, of course, be prepared to afford every information on the subject.

The directors are happy to be enabled to add that, by a memorandum just received from Canada, Messrs. Brydges, Watkin and Carter have proposed to refer the terms upon which the Buffalo and Lake Huron Company may join in the federation of the Grand Trunk and Great Western Railways to the decision of the chairman of the London boards of those three companies for settlement.

Immediately after the London meeting in December, Mr. Brydges laid his resignation before the directors, intimating at the same time his willingness to remain in their service until a successor could quite conveniently be appointed. Mr. Brydges was shortly after engaged by the Grand Trunk Railway Company as their manager. Under these circumstances, when the agreement before referred to was entered into with that company it became obviously undesirable to appoint any successor to Mr. Brydges if that arrangement were to be carried out.

Pending, therefore, the decision of the proprietors upon the agreement proposed, the directors have retained the services of Mr. Brydges in the position he has hitherto occupied.

Signed on behalf of the Board of Directors in England,

F. S. Read,
Chairman of the English Board.
London, April 24, 1862.

RAILWAY ACCIDENTS.

THEIR CAUSE AND MEANS OF PREVENTION.

The *London Engineer* makes the following report of a paper read by Mr. James Brunlees, before the C. E. Institute of Civil Engineers of London, at a meeting of the Institute on the 1st of April.

"The author proposed to treat the subject by dealing with the facts as they were, the causes of accidents being in nearly all cases, sufficiently apparent he would not, therefore, attempt by theory to establish rules for their prevention. From the reports of the officers of the Board of Trade, it appeared that during the seven years from 1854 to 1860, the number of accidents amounted to 540, as the result of 1274 distinct causes. Of these accidents, 11 per cent were attributed to the permanent way, 7 per cent to the rolling-stock, and 76 per cent to the management, including insufficient means for securing safety, leaving only six per cent as not ascertained.

"The accidents due to the permanent way were then referred to in detail, and it appeared that the general defects were most evident in the system of ballasting, of joint-fishing, of turning the rails, and of fastening the chairs to the sleepers. With regard to the ballast, it was argued that it would be found economical to have at least 6 inches or 9 inches of rough gravel or broken stone as a free draining bed to the sleepers and to the 'top-dressing;' and that during the months of September and October an extra number of men should be employed to drain the ballast and beat up the road, in order that it might become consolidated before the winter's rains and frosts set in, and thus avoid the evil effects of frost on wet ballast. It was urged that the plan now in general use of placing the fish-joint between two sleepers was objectionable as the ends of the rails were unsupported except by the fish-plates, which together were frequently only equal to two-thirds of the section of the rail. It was sub-

mitted that all the joints should be fished directly over a sleeper, or that a bracket-chair should be used. The practice of turning the rails was condemned, because when a rail was so much worn as to require turning its strength was generally so reduced as to render it unfit for main line traffic. With regard to the fastening of the chairs to the sleepers, it was urged that it was desirable that iron spikes only should be employed on the outer side of curves, or else that the chair should be partially sunk into the sleeper, to lessen the strain on the tree-nail. The superior economy of steeled, or partially steeled, rails points and crossings, was also incidentally noticed.

"In reference to the accidents which had arisen from defective or neglected rolling-stock, it was found that many of the fractures had occurred during the winter months, owing, possibly, in some degree to the rigid state of the 'way' in frosty weather; whilst others were due to the use of bad iron, and some to defects either in the welding of, or in the mode of attaching the tires of the wheels. Steel, or partially steeled, tires were now to a certain extent in use, and tires formed of a continuous ring, or unwelded piece of metal, were also successfully employed. Several new methods of fastening the tires had proved as fruitful of mischief as the ordinary plan of simply sinking them on, though others had been found to be efficient; and it was said that on some lines the tires had failed to any great extent. The author hoped that the importance both of the tires and of the axles of wheels would lead to a useful discussion on this branch of the subject. The usual want of uniformity in the main features of the carriage portion of the rolling stock was then commented upon; and it was considered that this variety not only increased the cost of manufacture and of maintenance, but was often the cause of accidents, and frequently contributed to render them disastrous. The author thought that the carriages should be nearly uniform in size and that the buffers should in all cases be the same height above the rails. The longitudinal beams should be in the same line throughout, be strong in themselves, and the framing securely braced. The present coupling in the centre should be increased in strength, and the whole attachment between the carriages should be such as to render a train in effect, as far as practicable, as one carriage, with a certain amount of flexibility; so that, in the event of a collision, the carriages should retain their position, instead of rising one upon another; and if an axle or wheel broke, the crippled carriage should be partially borne up by the neighboring carriages until the train could be stopped.

"On the question of management, after some remarks upon the speed of trains, it was shown that by punctuality, both in the time of starting and the rate of running, safety, as far as human foresight was concerned, was insured. The system of working the traffic of a railway by allowing an interval of time between the trains was deemed unsatisfactory, and far inferior to the system of an interval of space. The accidents arising from the irregularity of excursion trains were then alluded to, and it was remarked that if, during the summer and autumn, the ordinary trains were to run at lower rates of fares, the traffic would be increased, as the public would feel greater security in traveling. The difficulty in running coal or mineral trains to a fixed time-table might be met by a more general use of the electric tele-

graph, and by a better system of signaling arrangements. During the seven years, from 1854 to 1860 inclusive, 88 accidents happened from inefficient signals, of which 14 occurred in 1860. In some cases, especially at sidings, there were no signals; in others they were defective in form, or were improperly placed. It was desirable that junction signals and points should be worked simultaneously by one man, and at junctions separate main and distant signals should be provided for each line. If the system of working the traffic by the electric telegraph was generally adopted, and the line was divided into sections, so that a train should be prevented from entering any section until the preceding one had passed to the section in advance, collisions would be impossible, except those liable to arise from a disregard to the signals, and a proper interval would be secured between the trains, in spite of unpunctuality. As a want of a means of communication between the engine-driver and the guard or conductor had frequently been experienced, and as plans were in daily use on several lines, there was no reason why it should not be adopted on all. To render it fully effective the guard, or conductor ought to start the train from each station by means of that machinery, so as to prove that it was in working order. Owing to the general high speeds and heavy trains it was of the utmost importance that ample brake-power, capable of being applied in the least time, should be provided with each train. It was a question how far a regular distributed retarding force, acting at the same moment on all the wheels, might not be preferable to a concentrated force applied at particular points. By the system of "continuous brakes" the employment of several men with each train was unnecessary. It had also another advantage, that a train was more under control, and could be stopped in a shorter distant. The negligence of servants, arising from their ignorance or inefficiency, was next adverted to, and it was thought to be due to the pay being to low to command the services of men of intelligence, steadiness, and self-reliance. Frequently they were insufficient in number, leading to overwork, and instances were on record in which engine-drivers had been employed for seventeen hours daily, and in some cases for twenty-six and thirty hours continuously.

The author proposed leaving the bearing of existing legislation upon railways to be dealt with by Captain Douglas Galton. He would, however, observe that Government interference was not likely to render railways safer, or more available to the traveler; and that it would be better to rely on the consideration and calm reflection of those immediately interested in these enterprises, especially as from the heavy expenses attendant on accidents, directors and shareholders would naturally desire to render this mode of traveling as safe as possible.

Mr. Howson exhibited specimens of the fibre of a plant termed *Hibiscus Moscheutos*, or *Palustris*, and remarked that he had shown similar specimens about a year ago, but now repeated the exhibition, owing to the importance attached to the discovery, not only by eminent naturalists, but by the authorities of the Patent Office, who have issued letters patent to Mr. Cantelo, the discoverer, and to his assignees, Messrs. Stuart and Peterson, for the exclusive use of the fibres of the plant in question, for the manufacture of paper, cordage, textile fabrics, matting, &c. It would be a difficult matter

to distinguish the specimens of rope made of this fibre from the best hempen rope, which it equals in strength and durability. Serviceable matting and excellent paper may be made from the fibre, which can, by the aid of proper machinery and appliances, be converted into valuable textile fabrics. The *hibiscus moscheutos* grows wild in the marshy grounds of most of the Northern States, and is especially abundant in New Jersey.—*Jour. Franklin Inst.*

LONDON GAS WORKS.

[Concluded from page 212.]

A considerable number of iron tanks are met with at the various gasworks of London. One at the City Gasworks, about 85 ft. in diameter and 33 ft. deep, is annular, the inner ring being 75 ft. or 80 ft. in diameter, well filled in with concrete and strongly hooped with wrought iron bars. It depends upon the size of a tank whether it is cheaper to remove the whole body of earth to the bottom, paving the latter with iron plates, or to open out a circular trench only and plate it on both sides. In the case of the tank at the City Gasworks, the latter course was adopted, the trench being opened out about 6 ft. wide all the way down, the sides being planked and shored as the excavation went on. Iron plates for gas-holder tanks are commonly cast in sizes of about 5 ft. by 3 ft., the lower tiers of plates being made of a thickness corresponding to the depth of the tank, say $1\frac{1}{2}$ in. for 30 ft., while the upper plates are about $\frac{3}{4}$ in. thick. Each plate is stiffened by stout ribs on the back, and each tier of plates is bound together by a hoop or band of wrought iron; those near the bottom of the tank being perhaps 5 in. by $1\frac{1}{2}$ in. The plates are cast with 3 in. flanges, caulked with iron cement. The latter substance is so much used about gasworks that we may as well give here the usual proportions for its composition. To 16 parts (by weight) of clean cast iron borings are added 2 parts of sal ammoniac, and 1 part of flour sulphur. These are mixed dry, and, when required for use, one part of the mixture is added to twenty parts of clean cast iron borings, and worked up in a proper quantity of water. A little grindstone sludge mixed with the cement improves it.

As for the construction of gasholders we can hardly do better than reproduce the particulars of the large holder at Kennington oval, erected by the Horsley Iron Company, of Tipton, under the direction of Mr. Innes, engineer to the Phoenix Gas Company.

The lower lift is 160 ft. in diameter, and the upper lift 157 ft. 9 in., the "grip" of the lower lift being 9 in. wide and 15 in. deep, and the cup at the bottom of the upper holder also 9 in. wide and 15 in. deep. The holder is guided upon sixteen columns, each formed of boiler iron, and each 73 ft. high from base to cap. These columns are about 32 ft. 8 in. apart from center to center, the diameter, or distance between the centers of the two opposite columns, as measured across the tank, being 166 ft. 9 in. The distance across the tank, from face to face of guide iron, is 161 ft. 4 in.

The columns are 3 ft. 3 in. in diameter at the base, 3 ft. 2 in. at the middle of their height, and 2 ft. 8 in. at top. They are formed of tiers of plates averaging about 6 ft. high, and having three plates in the circumference of each tier. The lower two tiers or rings of plates are of $\frac{3}{4}$ in. iron, all the others being $\frac{1}{2}$ in. At the bottom of each column is an

angle iron ring, 4 in. by 3 in. by $\frac{3}{4}$ in., this ring being rivetted to the column and held to the cast iron base below by sixteen bolts $\frac{3}{4}$ in. in diameter. Each column (the cast iron base of the column) is tied down by four bolts, there being in all 64 tie bolts, each 16 ft. long and 2 $\frac{1}{2}$ in. in diameter. Where they pass through the tie down plate, which is built into the brickwork of the tank the bolts are made square for a few inches. Cottars 3 in. by $\frac{3}{4}$ in. go through the lower ends of the bolts under the tie down plate. The base castings forming the bottom of the columns are 9 in. high, 5 ft. 6 in. by 4 ft. 9 in. square on the sole, and of a good thickness of iron. Outside of these are castings of $\frac{1}{2}$ in. metal, forming a plinth and moulding, the whole averaging 2 ft. 6 in. high. A Doric capital in $\frac{1}{2}$ in. metal is fitted also to the top of each column. The tops of the columns are tied together by two rods, each 2 in. in diameter, and at the middle of their height they are tied together by two rods, each 1 $\frac{1}{2}$ in. in diameter, 992 lineal feet of each diameter of tie rod being employed for tying the columns together. The usual practice, as our readers will be aware, is to employ cast iron columns with cast iron girders between them. For the latter there is really no occasion whatever, all the support afforded by girders being equally obtainable by means of tie rods.

On the inner face of each column, and descending, also, to the bottom of the tank, is a T shaped guide of cast iron, each guide being 109 ft. high from the bottom of the tank to the top of the column. These guides are 6 in. wide on the face, on the rib projecting 6 in. also, and are cast 1 $\frac{1}{2}$ in. thick throughout.

Around the lower edge of the lower lift is a cast iron curb, made in two portions. The one is a cast angle iron, 7 in. by 6 in., and of $\frac{3}{4}$ in. metal. This being cast to the right curve is applied on the inner side of the holder, the 7 in. side being upright and the 6 in. side projecting horizontally outward. A corresponding cast channel iron, 6 $\frac{1}{2}$ in. high, 4 in. wide, and $\frac{3}{4}$ in. metal, is then applied to the outside of the holder. The respective portions being cast in segments about 12 ft. long are put on so as to break joint with each other, and are bolted together through the holder, and also by their bottom flanges, $\frac{5}{8}$ in. bolts being used.

The grip is made with 3 in. by 2 $\frac{1}{2}$ in. angle iron in 18 ft. lengths, with lapping pieces of the same section, and 2 ft. long at the joints. The top of the grip is made of $\frac{3}{4}$ in. plates cut in segments of the greatest length of which the iron would admit, and 7 in. wide all round. These segments are put together with butt plates on the joints, each 6 in. long. The dripping portion of the grip is made of $\frac{1}{2}$ in. plate, edged on both sides at the bottom with 2 in. by $\frac{1}{2}$ in. round iron.

The top tier of plates next the grip, and the bottom tier next the curb of the lower holder, are $\frac{1}{2}$ in. thick and 2 ft. 6 in. wide. The next contiguous tiers, one above and one below, are of $\frac{1}{4}$ in. iron, and about 2 ft. wide. The next contiguous tiers are of No. 12 gauge, all the others being of No. 14 gauge. On the inside of the lower lift, and at positions corresponding to the columns outside, vertical stiffening plates, 2 ft. wide and 3-10 in. thick, are put in for the whole height. The sides of the lift are stiffened by forty-eight vertical Memel timbers 6 in. by 3 in. in section. These are arranged as follows: Sixteen pairs $\frac{1}{2}$ ft. apart and placed on the inside of the lift, one pair opposite each column, and the rest of the timbers or stays are arranged so as to come

in intermediate between each pair. These timbers are securely bolted to the grip at the top, and to the curb at the bottom, and also with two $\frac{5}{8}$ in. bolts to each tier of plates in the sides of lift.

The lower lift is guided by sixteen 5 in. cast iron rollers, 6 in. wide, attached by plate iron brackets to the bottom curb, and by the same number of 12 in. rollers at the top, each 6 in. wide on the face and having a flange 3 in. deep on one side.

The upper lift of the holder has a top curb made with angle iron, 6 in. by 3 $\frac{1}{4}$ in. by $\frac{5}{8}$ in., with lapping pieces 3 ft. long at the joints, and connected to a ring of $\frac{5}{8}$ in. plate iron, 21 in. wide, forming a portion of the top of the holder. The sides of the upper lift are $\frac{1}{2}$ in. thick next to the curb and the cup, the next contiguous tiers of plates being 3-10 in. thick, and all the others of No. 12 gauge. The cup is made precisely the same as the grip of the lower holder, the same sections of iron being used throughout. The sides of the upper lift are stiffened by thirty-two Memel timbers, sixteen being placed so as to come opposite the columns outside, and the rest intermediate between them. The timbers opposite the columns are 12 in. by 3 in. in section, and are each fastened by a pair of angle irons 4 in. by 3 in. by $\frac{1}{2}$ in. The intermediate stiffening timbers are 9 in. by 3 in. Gusset stays of 3 in. by 3 in. by $\frac{1}{2}$ in. angle iron extend also from the angle irons holding the 12 in. by 3 in. timbers, diagonally inward and upward to the inner edge of the curb plate in the top of the holder.

The top of the holder next to the $\frac{5}{8}$ in. curb plate is $\frac{1}{2}$ in. thick, the next interior ring of plates being $\frac{1}{2}$ in., the next No. 10 gauge, and all the others in the center, of No. 12 iron. The top was laid out to be perfectly flat, but the slight stretching of the plates occasioned by rivetting over a surface of nearly half an acre in extent, drew the iron up in the center to a height of 4 ft. or 5 ft., the present form of the top being that of a segment of an immense sphere.

A man hole 5 ft. in diameter in the clear, and 6 in. high, is made in the top of the holder. The rim is made of $\frac{1}{2}$ in. plates, with 2 $\frac{1}{2}$ in. by $\frac{3}{4}$ in. angle iron, and the top also of $\frac{1}{2}$ in. plate, held down by $\frac{1}{2}$ in. bolts placed 3 in. from center to center, the joint being made with a hemp gasket and red lead.

The upper lift is guided within the lower lift by small rollers attached to the lower outer edge of the cup, and by sixteen wheels 3 ft. in diameter, mounted on large standards on the top of the curb.

All the joints of the plates were caulked with two strands of whip cord laid in on opposite sides of the rivets. All the plates and wrought iron work were thoroughly coated with raw linseed oil, the joints being furthermore coated with a mixture of red lead and oil. The whole of the holder, both inside and out, was afterwards painted with two coats of red lead mixed in equal quantities of boiled and raw linseed oil, and the work afterwards proved with compressed air.

Holders with flat tops have been adopted in several cases of late, but it has been more customary to form the roof to a portion of a sphere, and to truss it with struts and tie rods. The roof of the great holder near the Hackney road is stiffened in this way. Even when the holder contains more or less gas, so that the roof is supported clear of the ground below, the pressure of the gas, equal to from 200 to 250 tons under the roof of a large holder, would seem to require some amount of strengthening in the roof. When down, a flat

roof can rest on a timber framing so as to avoid sagging, while, with a trussed roof with a boss in the center, the support is generally upon the cone of earth left in the tank, a stone coping or iron plate being put in to take the bearing.

The earlier gasholders, of small dimensions, required to be counterweighted, but with large holders now made no counterweights are necessary. On the contrary, iron has to be added to obtain the proper pressure of the holder upon the gas. The general weight or pressure of the large London gasholders is equal to 5 in. of water over the whole surface. The Phoenix Company's holder, which we have described, weighs 250 tons 18 cwt., of which 207 tons 13 cwt. are wrought, and 43 tons 5 cwt. are cast iron. The total weight of holder and columns, guides, and all ironwork, is 429 tons 18 cwt., of which 291 tons 19 cwt. is wrought, and 137 tons 19 cwt. cast iron. The great holder near the Hackney road is said to "throw" at a pressure equal to 8 $\frac{1}{4}$ in. of water when filled. The total ironwork in this holder is about 1,500 tons, there being a peristyle of Doric and Corinthian columns, rising from twenty-four pedestals, each weighing 5 tons, and cast in a single piece.

An excellent holder, 150 ft. in diameter, and rising, by two lifts, to a height of 50 ft. was erected last year at the Western Gasworks, under the direction of the Company's engineer, Mr. Pritchard. The upper curb of the top lift is made of $\frac{1}{2}$ in. and $\frac{3}{4}$ in. plate iron, so as to form, with the sides and top of the holder, an annular box 18 in. deep and 2 ft. wide all round. No truss is used in the roof. The joints throughout the holder were put together on painted tape. The whole cost of the holder and tank was under £12,000, including all connections. It is, we are told, more difficult to secure tightness in a holder intended for canal gas than for ordinary gas; but Mr. Pritchard's holder, which contains only canal gas, has remained perfectly tight.

Almost all large gasholders are now made in two lifts, upon the telescopic plan. This plan greatly diminishes the cost of the tank, which need be hardly more than half as deep as would be necessary if the whole depth of the holder were in a single lift. On the other hand, the cup of a double lift holder is more or less liable to leak, and especially liable to freeze up in winter.

In the valuable paper already referred to as read by Mr. Williams to the Society of Engineers, he gave the sizes and cost of a number of gasholders as follows:

The two holders erected in 1853 at the Commercial Gasworks have brick tanks, and have each two lifts, the outer or lower lift being 122 ft. in diameter and 24 ft. 6 in. high, while the upper lift is 119 ft. 4 in. in diameter and 26 ft. high. The capacity of each is 580,000 cubic feet, the pressure equal to 3 $\frac{1}{2}$ in. of water. The cost of the two holders was £17,056 14s. 8d., equal to £8,528 each. These holders have flat crowns without trussing. Two other holders erected at the same works, the one in 1850 and the other in 1852, were each 102 ft. in diameter on the lower and 100 ft. on the upper lift, each lift being 26 ft. high. The capacity of each is 416,000 cubic feet, and the pressure 5 in. of water. One of these holders cost including brick tank, £4,900, and the other £5,350. A single lift holder with brick tank, belonging to the Imperial Company, is 157 ft. in diameter and 40 ft. high, holds 720,000 cubic feet of gas under 5 in. pressure, and cost £11,100. It was put up in 1853. A telescopic holder belonging to the Phoenix Company, 150 ft. in diameter, 37 ft.

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	48		\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.	65	380	13,111,800	10,781,833	566,070	3,922,203	2,303,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5	88	1885	
do do										"	2,500,000	6	84	1880	
do do										"	700,000	6	84	1880	
do do										"	1,124,500	6	90	1875	
do Washington Branch.....	Md.	30		1,650,000						"	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7	55	1866	
do do										2d "	160,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	122	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	132	75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000	6	100	1864	
Camden and Amboy.....	N. J.	96		3,798,400	8,880,000		1,997,063	733,950	Dec. 31, 1860.	1st Mortgage.....	3,770,000	7	62	1861	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7	80	1864	
do do										1st "	800,000	7	80	1864	
do do										2d "	600,000	7	64	1865	
do do										3d "	950,000	7		1865	
do do										4th " S. F.	1,365,000	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d "	600,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d "	1,535,000	7			
do do										3d "	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d "	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,756	7,335,403	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	80	Feb. & Aug. 1	
do do										2d "	3,500,000	7	84	Feb. & Aug. 1	
do do										2d "	2,000,000	6	24	May 1.	
Chicago and Rock Island.....	Ills.	88	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	105	1870	
Chicago, Burlington and Quincy.....	"	80	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	106	1873	
do do										" 2d " S. F.	813,000	8		1890	
do do										1st Mor. Chl. & Aur.	399,000	7		1867	
do do										2d "	303,090	7		1869	
do do										1st "Cent. Mil. Tract	392,000	7		1864	
do do										2d "	245,000	8		1868	
Chicago, Iowa and Nebraska.....		82		No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	60		2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	950,000	7	100	1880	
Cincinnati Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
do do										Income.....	305,599				
Cleveland and Mahoning	Ohio.	68		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d "	469,000				
do do										3d "	244,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	114	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7	91	1873	
do do										3d 2d Ex.....	1,165,000	7	80	1865	
do do										4th 3d Ex.....	1,154,000	7	64		
Cleveland and Toledo.....	Ohio.	48	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	359,000	7	65	1867	
do do										1st " 2d Div.	263,000	7	65	1872	
do do										2d " "	265,000	7		1862	
do do										1st " Tol. Nor & Clev	521,000	7	75	1863	
do do										2d " "	293,300	7		1863	
do do										Junction Income..	44,500	7		1864	
do do										C. & T. Income..	300,000	7		1864 & 1890	
Cleveland, Columbus and Cincinnati..	Ohio.	116	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000				
Cleveland, Painesville and Ashtabula..	"	125	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	99		1861	
do do										2d "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	87	54	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700			1866 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666	2,512,000	292,267	375,002	212,107		2d "	2,212,000	8			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000		50	1875	
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000	7		1866	
do do										2d "	1,000,900	8			
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		986,061	1,219,100	249,668	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d "	180,000				
Galena and Chicago Union.....	Ills.	72	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000		103	1862 & 1863	
do do										2d "	1,320,000		100	May 1, 1875	
Great Western	Ills.	175		1,000,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000				
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report	75,000	63,141	13,573		Land Mortgage.....	5,000,000		26		
Greenville and Miami.....	Mo.	32		300,000	473,000					Mortgage Conv.....	1,354,000		30		
Hannibal and St. Joseph.....	Mo.	206		1,041,000	10,554,000	220,336	996,907	512,933	Sept. 1, 1860.	1st Mortgage.....	927,000	6	99	1873	
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	4,000,000	7	102	1869 & 1870	
Hudson River	N. Y.	48	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	2d "	2,000,000	7	106	1870	
do do										3d "	1,840,000	7	101	1875	
Illinois Central.....	Ills.	63	455	15,654,980	15,672,240		2,778,333	1,138,640	Jan. 1, 1860.	Optional.....	38,000	7	64	1868	
do do										Construction.....	12,885,000	7	95	1875	
do do										"	4,115,000	6	96	1875	
do do										Debentures.....	42,740	7			
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000	7			
do do										2d "	578,000	10			
do do										Income.....	38,700	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000	7	85	1866	
do do										2d "	400,000	7	85		
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort..	200,000	7	62		
do do										1st Mortgage.....	649,984				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d "	314,000				
Iron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable
Iron Mountain.....	Mo.		86 1/2	\$ 1,970,937	\$ 3,501,000	43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st 249,000		75		1861	
do										2d 392,000		70		1873	
Kentucky Central (Covington and Lexington).....	Ky.		99	Sold out under mortgage	2,930,000	337,632	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st 250,000		7			
do										2d " Conv. 1,000,000		7			
do										3d 600,000		7			
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiver.						1st Mortgage E. D. 903,000		89			
do										2d " E. D. 1,000,000					
do										1st Land Grant W. D. 4,000,000		21			
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report			1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.		29	514,433	130,000		103,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883	
Little Miami.....	Ohio.	100	65				1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000				
Louisville and Frankfort.....	Ky.		65	1,169,59	384,519		245,910	98,679	June 30, 1861	1st Mortgage.....	248,000				
do										1st Mortgage.....	2,000,000	7			
Louisville and Nashville.....	Ky.		268	5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br. 400,000					
do										1st " Memphis Br. 500,000					
Louisville, New Albany and Chicago..	Ind.		288	2,800,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.		87	1,648,050	1,285,300	87,969	230,563	99,030	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.		203	8,561,213	196,468	108,150	439,049	78,800	Aug. 1, 1861	1st Mortgage Conv. 2,500,000		7		1868	
do										2d " 2,000,000		7			
do										3d " 1,500,000		7			
do										Sterling Income... 333,000		4			
do										Domestic 928,617					
Michigan Central.....	Mich.	08	284	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	1st Mortgage Sterling 467,489		6	98 1/2	1872	
do										1st " Conv. 500,000		8	84	1869	
do										1st " unconv. 250,000		8	96	1860	
do										1st " Dollar Conv. 2,598,000		8	104 1/2	1869	
do										1st " S. F. Conv. 4,153,000		8	106 1/2	1862	
Michigan South'n & North'n Indiana	Mich. &	28 1/2	246	9,018,200	9,714,704	437,886	2,075,459	1,039,629	Mar. 31, 1861.	Mort. Mich. So. 991,000		103		1860	
do										" Nor. Ind. 985,000		103		1861	
do										" Goshen Line. 1,168,000		100 1/2		1868	
do										S. F. Toledo 2,550,000				1885	
do										2d Mortgage 2,465,000		4 1/2		1877	
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8			
do										2d " 200,000		7			
Milwaukee and Horicon.....	Wis.		42	1,101,200						1st Mortgage.....	420,000	8			
do										2d " 600,000		8			
Milwaukee and Prairie du Chien.....	Wis.	27 1/2	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	99	1891	
Milwaukee and Western.....	Wis.		71	No report											
Mississippi and Missouri.....	Iowa,		35	No report						1st Mortgage Conv. 1,000,000		7			
do										2d " S. F. 400,000		8			
do										Oskaloosa Div. 1,425,000		7			
New Jersey.....	N. J.	13	34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Land Grant..... 7,000,000			102 1/2		
New Jersey Central.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	Mortgage..... 711,000					
New York and Erie Pref.....	N. Y.	66 1/2	38 1/2	Sold under mortgage			5,590,916	1,979,400	Sept. 30, 1860	1st Mortgage..... 3,000,000		105			
do										2d " 4,000,000		105			
do										3d " 6,000,000		99			
do										4th " 4,900,000		86 1/2			
do										5th " 1,792,500		88 1/2			
New York and Harlem Pref.....	Conn.	44	138	5,717,190	6,055,752	.....	1,142,851	433,716	Sept. 30, 1860.	1st Mortgage..... 2,950,000		7	102 1/2	1873	
do										2d " 1,000,000		7	101	1864	
New York and New Haven.....	Conn.		18	3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage..... 912,000		6	94	Dec. 1, 1866	
do										" 975,000		6		Oct. 1, 1875	
New York Central.....	N. Y.	95 1/2	556	24,000,000	14,613,005	none.	7,369,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H. 7,925,000		6	100 1/2	May 1, 1883	
do										Mortgage..... 3,000,000		6	106 1/2	June 15, 1884	
Northern Central.....	Md.		138	2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction..... 2,086,500		6		1885	
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan..... 4,350,000					
Ohio and Mississippi, Eastern Div....	Ohio & Ind		192	Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage..... 2,193,500		6			
do										3d " 316,995					
do										Construction..... 4,637,920					
do										Income..... 3,591,185					
Ohio and Mississippi, Western Div....	Ills.		148	.....	3,292,403		No report			State Loan..... 7,000,000		6			
Pacific.....	Mo.			3,199,662	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	" " S. W. 2,800,000		6			
do										Construction..... 4,500,000		6			
Pennsylvania.....	Pa.		359	13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv. 4,900,000		6	104 1/2	1888	
do										2d " 2,319,000		6	98 1/2	1875	
do										2d " Sterling. 1,957,440		5	89	1875	
do										State Works..... 7,200,000					
Peru and Indianapolis.....	Ind.		74	1,100,090	820,000	80,000	No report			1st Mortgage..... 2,300,000		6	99 1/2	1894	
Philadelphia, W. and Baltimore.....	Del.		98	5,600,000	2,310,000		1,236,597	471,712	Oct. 31, 1860.	Improvement..... 119,000		6		1863	
do										1st Mort. O. & P. 1,000,000		7		1865	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	2d " 750,000		7		1866	
do										1st " O. & I. 1,000,000		7		1872	
do										2d " 380,000		7		1873	
Pittsburgh and Connellsville.....	Pa.		49	1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n. 500,000					
Racine and Mississippi.....	Wis.		104	2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.						
Sandusky, Dayton and Cincinnati. ..	Ohio.		170	2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage..... 125,000		7		1856	
do										" 997,000		7		1866	
do										" 1,000,000		7		1875	
Sandusky, Mansfield and Newark....	Ohio.		125	848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage..... 1,290,000		7		1886	
Scioto and Hocking Valley.....	Ohio.		56	403,975	500,000	100,000	110,200	53,100							
Springfield, Mt. Vernon & Pittsburgh..	Ohio.		50	1,000,000	1,050,000	200,000				1st Mortgage..... 500,000		7			
do										2d " 450,000					
Staubenville and Indiana..	Ohio.			No report						1st Mortgage..... 1,500,000		7		1870	
do										2d " 900,000		7		1865	
Terre Haute, Alton and St. Louis.....	Ills.		208	No report						1st Mortgage Conv. 1,000,000		7	100	1862	
do										2d " Conv. 2,000,000		7	85	1863 & 1870	
do										1st " Bel. & Ill. 517,000		7		1873	
Terre Haute and Richmond.....	Ind.	100	73	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage..... 230,000		7	91	1866	
Toledo, Wabash and Western.....	Ohio & Ind	51 1/2	243	2,123,500	3,996,049	52,389	233,545			1st Mortgage..... 3,400,000		7		Aug. 1, 1885	
do										2d " 2,500,000		7		Nov. 1, 1878	
do										Mort. Coupons.... 96,049		7		1860 to 1865	

high, and holding 630,000 ft., cost £12,500, of which the brick tank cost £4,000. This was erected in 1847. The holder of the Crystal Palace District Gasworks, at Sydenham, is telescopic, and works in a brick tank. The lower lift is 62 ft. 6 in. in diameter, and 18 ft. 6 in. deep. The upper lift is 60 ft. in diameter and 20 ft. high. The capacity is 113,300 cubic feet, and the pressure $7\frac{1}{2}$ in. The cost, erected in 1854, was £3,230.

From the gasholders the gas passes through the governors to the mains. The governor is made like a small gasholder, but to the movable part is attached a conical valve in the inlet pipe. Thus, as the pressure increases, and the small holder of the governor rises, the conical valve shuts off a portion of the incoming gas.

The mains, which are laid 2 ft. or 3 ft. below the surface of the ground, are always made with socket joints, caulked with yarn with about 2 in. of lead over it. A 36 in. main is about $\frac{3}{4}$ in. thick, except at the socket, where the thickness may be $1\frac{1}{4}$ in. or $1\frac{1}{2}$ in. thick to give strength to withstand caulking. A 24 in. main is hardly more than $\frac{1}{2}$ in. thick. The smaller mains are not far from $\frac{3}{8}$ in. thick.

It would be interesting here to enter upon the question of the flow of gas through mains, but our space does not permit.

The condition of the London gas companies in 1859 and the four preceding years was made public in 1860 through the labors of a select committee on the supply of gas to the metropolis. From the particulars then elicited we give the following:

Name of Company.	Capital 1859.	Cap'l paid up 1859.	Debtors 1859.	Divid 1859.
Chartered, ...	£900,000	£600,000	nil.	8 pr. ct.
City of London, ...	300,000	310,000	"	6 "
Commercial, ...	320,000	273,210	14,600	6 "
Equitable, ...	200,000	200,000	69,750	6 "
Great Central, ...	200,000	172,160	66,000	5 "
Imperial, ...	1,300,000	934,705	149,000	9 "
Independent, ...	120,000	120,000	30,000	5 "
Ratcliff, ...	100,000	100,000	nil.	5 "
Western, ...	300,000	205,000	39,000	7 "
London, ...	555,788	550,228	82,280	4.6 "
Phoenix, ...	540,000	468,000	nil.	8 "
Surrey Consumers, ...	150,000	132,338	34,500	8 "
South Metropolitan, ...	200,000	152,000	nil.	9 "

Totals, ...

Since 1859, the profits of the London gas companies have increased, and some of those then dividing 5 or 6 per cent. are now paying 10 per cent. The coal carbonised by the Chartered Company, at their three stations, in 1859, was 116,554 tons.

MOVEMENT OF FREIGHT ON THE RAIL AND WATER LINES OF PENNSYLVANIA AND NEW YORK.

The State of New York having uninterrupted water communication between its great seaport and the lakes owns the principal artificial route between the East and the West, for the carriage of the produce of the interior to the seaboard. More than this, New York has two rail routes with the trade centres of the inland region, with a net work of iron outstretching West even into the frontier States. New York, therefore, is in a condition to command a vast tonnage over her carrying lines, and that she does command such tonnage the tables of tons moved indubitably attest. Nevertheless, it is a fact that, notwithstanding her two fold means of communication with the country back and beyond her territory—a vast country always in communication with the seaboard for the interchange of commodities, after the fashion which establishes and perpetuates commercial relations—the artificial improvement

lines of New York carry a less number of tons of freight in a year than are carried over the artificial improvement lines of Pennsylvania!

The reason of the preponderance of tons carried by the Pennsylvania lines is, that, whilst New York has more variety in her facilities for carrying freights between the East and the West, Pennsylvania has more capacity for supplying freights from her own resources. In truth so marked and positive is the difference between the two States in capacity for production of marketable tonnage, that Pennsylvania produces more tons from within her own territory than all the tonnage carried across New York, superadded to the tonnage supplied from all sources within New York.

In internal commerce, consequently, Pennsylvania is dominant over New York, as much so as is the seaport of New York, in foreign commerce, dominant over the seaport of Pennsylvania.

In 1861 the more important lines of the two States moved the number of tons subjoined.

New York carriers:	Tons.	Tons
New York State Canals, ...		2,950,144
New York Central Railroad, ...	1,167,302	
New York and Erie R. R., ...	1,233,419	
Buffalo and State Line R. R., ...	60,021	
Hudson River Railroad, ...	370,098	3,390,850
Total, ...		6,370,994
Pennsylvania carriers:	Tons.	
Philadelphia & Reading R. R., ...	2,334,906	
Pennsylvania Railroad, ...	1,625,386	
Delaware, Lackawanna, and Western Railroad, ...	1,286,662	
Lehigh Valley Railroad, ...	1,176,745	
Northern Central Railroad, ...	489,155	6,921,354
Delaware and Hudson Canal, ...	1,502,851	
Schuylkill Canal, ...	1,305,377	
Lehigh Canal, ...	1,145,881	
Monongahela Navigation, ...	735,404	
Penn. R. R. Co.'s Main Line Canal (estimated), ...	520,000	5,349,513
Total, ...		12,270,927

Here we have a difference in favor of the Pennsylvania lines of 5,899,933 tons.

This is equal to ninety per cent!

The tonnage of the lines in the State of New York, other than those enumerated in the foregoing was 2,069,559 tons.

Tonnage of lines enumerated 6,370,994 tons.

Total tons moved in the State of New York, 8,440,553.

The aggregate is much below the joint tonnage of the ten Pennsylvania lines enumerated, whereas if all the lines in Pennsylvania were given, their joint tonnage would be more than twice the New York exhibit.—*U. S. R. R. and Mining Register.*

LAKE SUPERIOR TRADE.

The commercial importance of the Lake Superior region, in consequence of its distance from the seaboard, is not fully known.

Considering the newness of the country, the very few years since it was settled, and its exhaustless mineral wealth became to any extent remunerative, the facts we propose to give will surprise many, but are nevertheless true.

At the present time there are connected with the copper and iron districts a population of about 20,000 souls; in 1850 there was only 2,131. To give an idea of magnitude of the business now done, we need only state that during the season of 1861, there arrived at the port of Marquette—

Steamers Propellers, over, ...	400
Schooners and Barques, ...	102

During the season of 1860 more than three

times this number of schooners and barques arrived at this port, and will again this year.

In the very able report in relation to the Franklin Mining Co., by its agent Mr. Forester, we learn that last season (1861) there arrived at the port of Houghton.—

Steamers and Propellers, ...	274
Schooners and Barques, ...	20

We have no official information as to the arrivals at Copper Harbor, Eagle River, and Ontonagon but in the number of steamers they were at least equal to those of Houghton.

Ten years before the tonnage employed in the commerce of the country was truly insignificant as well as the business itself.

According to the estimate of the Superintendent of the Canal, the value of the copper and iron exported from the country, and the general merchandize brought into it in the year 1859, was \$9,887,404 60; in 1860, \$12,158,865 94. Of these amounts the value of the copper iron &c., exported in 1859, was in round numbers, \$3,000,000; the balance of the Superintendent's estimate, \$6,387,000, being of course the value of articles imported into the country for use or consumption.

In 1860 the value of the mineral &c. shipped was \$3,729,000; the balance of the estimate, or about \$8,500,000 being for the local wants of the country.

In 1850, ten years before, there was no iron shipped—at least the amount was so small that no record exists of it—the value of the copper was only \$265,000.

A large item of the import of these years was machinery for mining purposes, in many cases to open new mines, which will explain the large difference between exports and imports. Those of general merchandize embrace a wide range, as in all countries where almost every thing is bought, and but few of the necessities of life produced, as flour, feed, pork, beef cattle, dry goods, &c. To give some idea of this trade, we will specify the amount of a few of the leading articles of commerce during the year 1860. The amount of flour that passed through the Canal was 50,250 bbls; of pork, 5,747; bags of coffee, 1,758; chests of tea, 1,344; tons of powder, 650 $\frac{1}{2}$; tons of general merchandize, 10,289; head of cattle, 2,813; pieces of furniture, 12,157.

There are business houses on the lake who do an annual trade of over \$200,000.

The great interests which so largely distinguish the country—copper and iron—were never in a more prosperous condition than at this time. The process of mining has become so systematized, that the mines are worked economically and efficiently—thus yielding successfully an increased production while the demand exceeds the product at prices that warrant the most vigorous efforts. We hazard nothing in saying that the copper product will reach in value the present year \$1,000,000, and the iron \$1,000,000.

Nor is it so far removed from the business centres of the country. A pleasant steamboat ride of 48 hours will land passengers from in the midst of our more than fabulous iron mountains; 60 hours among the copper mines is, if possible, of still more interest. A railroad and steamboat ride of 84 hours will land the denizens of Boston and New York amid these northern wonders.

There are now nine first class steamers plying between Cleveland, Detroit, and all ports on this lake, and two from Chicago. By these steamers, freights reach all ports on the lake from cities below in an average of 60 hours; and from Boston and New York within eight days.—*Lake Superior News.*

STEEL AND IRON.

Mr. John W. Nystrom exhibited some specimens of Iron and Steel, manufactured at his establishment, Gloucester, N. J., by the process known as Bessemer's, and made the following observations:

The cast iron is smelted in an ordinary cupola, from which it is run into a barrel shaped furnace, where air is blown into the molten iron for about 10 to 15 minutes, the time required for decarbonizing it to steel or wrought iron; after which it is run direct from the steel furnace into moulds of any desired shape. Ingots thus cast can be taken direct to a rolling mill or steam hammer, and worked in the one original heat.

The steel furnace now in operation is for acting on 3,000 lbs. cast iron at a time, which gives about 2,500 lbs. of wrought iron or steel. The specimens exhibited are, one steel plate about 3-16 inch thick, and one $\frac{3}{8}$ inch round iron bar, both of which are rolled out direct from ingots cast in sand molds; also, one steel ingot and a piece of oxide of iron.

The cast iron thus far operated upon has been mostly the Allentown anthracite iron, No 2, and two operations with charcoal iron. I am inclined to believe that, with some experience, good iron and steel may by this process be made from any kind of cast iron.

Armor plates can by this process be cast into any size and shape; also, cast steel and wrought iron guns, and a variety of articles made by the complicated and laborious process of puddling, rolling, welding, and forging, can by this process be made into shape of the purest iron or steel in one heat. The great heat generated in the steel furnace enables the decarbonized iron to remain for some time in a perfectly fluid state, allowing the lighter impurities to rise to the surface in form of slag, and the pure metal to run into molds. In puddling furnaces, the decarbonized iron cannot attain so high a heat as to be kept in a fluid state, but of the consistence of dough, intermixed with and rolling in a fluid slag, which is partly squeezed out under a hammer or squeezer, after which the iron bloom is rolled out to a bar. This bar is cut in pieces, piled up into a packet, heated and rolled, which operation is repeated several times before good iron is obtained, and every time the iron passes through the rollers, slag is squeezed out of it; while by the process known as Bessemer's, the ingots rolled out to finished iron in the first original heat, slag is hardly perceptible.

The Bessemer process has in the last five or six years gone through the different stages of success, failure, ridicule and criticism, customary to every good thing, and is now in successful operation in several places in England and Sweden. The only difficulty I have to contend with in carrying on the process is the want of capital; as it is a new thing in this country, it is hard to convince capitalists of its great importance.

A great many parts of machinery which in Europe are made of wrought iron or steel, are in this country made of cast iron; now, by this process, such parts can be cast direct of steel or iron, which will materially reduce the weight and increase the durability of the machinery. I consider the process to be of the greatest importance for railroad iron, such as wheels, tyres, frog-plates, rails, &c. I am inclined to believe, that by this process cast steel rails can be made at the same price as that of the present puddled rails. Such cast steel rails would not only stand perhaps four times as long as iron rails, but it would increase safety and comfort on the road in the same proportion.

MONETARY AND COMMERCIAL.

The condition of the money market, as to loans and discount, is not materially different from its condition a week ago. The greater portion of the capital of banking has been employed in the speculative movements of gold, Treasury Notes, Government securities, bonds, etc. There is no serious increase of active commercial business to call into use the idle capital that has been accumulating for some time. Hence the turn that speculation has taken—speculators being ever ready to seize the least possible pretext that will aid their "operations." The proposed issue of Treasury Notes is in this case made the pretext. This plan of Secretary Chase has, however, in last week become very much popularized, and we doubt not that values will soon again find a proper level. *Thompson's Reporter* says on this subject:

Almost everybody either misunderstands or misapplies the Hon. Secretary's movement. The last sentence of his letter takes from the measure all the danger of an expansion of paper money. These are his earnest words: "No issue will be made except to meet expenditures authorized by Congress, which can not be met from the receipts of revenue, from the increased deposits, and from the proceeds of the conversions into the five-twenties."

The five-twenties are the 6 per cent. 20-year Stocks of the United States, redeemable at the pleasure of the Government after five years. To say that there is a great inflation of paper money, and that prices are fictitious by reason of such inflation, when every dollar of the paper money is fundable into a Federal 6 per cent. stock at par, is nothing more nor less than to say that Federal 6s are not worth par.

In a recent conversation with Mr. Chase, we observed that the announcement of his programme would cause gold to advance, etc. He observed that such might be its effect for a short time; but when the people come to understand that there can be no inflation beyond par for U. S. 6s, the public will be satisfied, and specie will fall again. This measure is precautionary, and only precautionary.

The exchange market is quite dull, and rates drooping. Quotations are:

	BUYING.	SELLING.
New York,.....	$\frac{1}{2}$ @ $\frac{1}{2}$ dis.	par.
Boston,.....	$\frac{1}{2}$ @ $\frac{1}{2}$ dis.	par.
Philadelphia,.....	$\frac{1}{2}$ @ $\frac{1}{2}$ dis.	par.
Baltimore,.....	$\frac{1}{2}$ @ $\frac{1}{2}$ dis.	par.
Gold,.....	6 $\frac{1}{2}$ @7 prem.	7 $\frac{1}{2}$ @8 prem.
Silver,.....	3 $\frac{1}{2}$ prem.	5 prem.
Demand Notes,.....	2 $\frac{1}{2}$ prem.	.....
7 3-19 do.	5@5 $\frac{1}{2}$ prem.	.....

The stock market is very feverish and variable, and parties who are interested either as buyer or seller need daily quotations to keep them fully posted. The *Tribune* of Saturday says, at the Second Board the market was steady, and toward the close, and afterward in the street, was strong, with more disposition to buy. Central, which was 93 $\frac{3}{4}$ in the morning, sold as high as 94 $\frac{1}{2}$. Toledo was very buoyant, and sold up to 48 $\frac{1}{2}$, on large receipts. Prairie du Chien advanced to 35; Michigan Southern Guaranteed to 63, etc. Governments were steady at yesterday's rates, and the market generally was strong. The latest

quotations were: U. S. 6s, Reg'd, 1881, 103@103; Coupon, 1881, 106 $\frac{1}{2}$; American Gold, 106 $\frac{1}{2}$; Tennessee 6s, 59 $\frac{1}{2}$; Missouri 6s, 51 $\frac{3}{4}$ @51 $\frac{3}{4}$; Pacific Mail Steamship Company, 115 $\frac{1}{2}$; New York Central, 94@94; Erie Railway, 37 $\frac{3}{4}$ @37 $\frac{3}{4}$; Erie Railway Preferred, 64 $\frac{1}{2}$; Hudson River Railroad, 47 $\frac{3}{4}$ @48; Illinois Central Railroad, 62 $\frac{1}{2}$ @62 $\frac{1}{2}$; Galena & Chicago Railroad, 71 $\frac{3}{4}$ @71 $\frac{3}{4}$; Cleveland & Toledo Railroad, 48 $\frac{1}{2}$ @48 $\frac{1}{2}$; Rock Island Railroad, 67 $\frac{1}{2}$ @57 $\frac{1}{2}$; Harlem Railroad, 17 $\frac{1}{2}$ @17 $\frac{1}{2}$; Harlem Railroad Preferred, 42 $\frac{1}{2}$ @42 $\frac{1}{2}$; Michigan Central Railroad, 64@64 $\frac{1}{2}$; Mich. Southern & Northern Indiana Railroad, 27 $\frac{1}{2}$ @27 $\frac{1}{2}$; Michigan Southern & Northern Indiana Railroad Guaranteed, 62 $\frac{1}{2}$ @62 $\frac{1}{2}$.

The earnings of the Chicago & Northwestern Railroad show an increase for the first week in June of \$6,021 28 over the corresponding week of last year, and for the second week of \$7,722 09.

The increase over the corresponding periods of last year in the earnings of the St. Louis, Alton & Chicago Railroad, for the week ending June 15th, was \$4,805 10; for the half-month, \$7,091 01; and since the first of January, \$67,251 20.

The increase in the earnings of the Galena & Chicago Railroad for the second week in June, over same week last year, was \$13,008 29; of the Toledo & Wabash Railroad for the same time, \$9,351; and the Michigan Central, \$9,101 65.

The Western Railroad of Massachusetts has declared a semi-annual dividend of 4 per cent. payable July 1st.

The interest on the fourth mortgage bonds of the Pittsburg Road will be paid on the 1st prox.

The Rock Island Railroad Company has declared a semi-annual dividend of 3 per cent. payable July 11th. The transfers close July 1st, and reopen on the 12th. The following is a statement of the business of the current six months, upon which the dividend has been declared:

EARNINGS—January, February, March & April,...	\$363,515
May, estimated,.....	95,000
June, estimated,.....	110,000
Total,.....	\$568,515
Leaving net,.....	284,257
Chargeable with six months' interest,....	\$49,000
Chargeable with six months' rent,.....	62,500
Chargeable with 3 per cent. dividend,....	168,090
Balance of income,.....	\$ 4,667

CHICAGO & ROCK ISLAND RAILROAD.—At the late meeting of the stockholders of this road held in Chicago, the following Directors were chosen for the ensuing year:—Henry Farnam J. F. Tracy of Chicago; T. C. Durant, F. H. Tows, E. W. Dunham, G. T. M. Davis, C. W. Durant, R. H. Forsyth, David Dows, H. Kennedy, and J. T. Sturgis of New York; E. Cook of Davenport, Iowa; and N. Peck of New Haven, Conn.

Henry Farnam was re-appointed President, and John F. Tracy, Superintendent.

The road is doing an excellent business and will before long, it is said, declare a dividend on earnings.

The following statement shows the business of the road for the nine months ending March 31st, 1862:

Earnings from passengers,....	\$254,071 12	
Earnings from freight,.....	737,144 47	
Earnings from mails, etc., ...	43,488 81—	\$1,031,703 70
An increase over the corresponding year of \$160,079 26.		
Expenses the same time (9 months) including extraordinary repairs,.....	521,386 86	
Leaving net earnings,.....	\$ 523,317 44	
Cost of new work,.....	\$35,875 12	
Taxes,.....	11,408 84	
Legal expenses,.....	2,247 19	
Int't on Bonds for 9 months, ...	73,132 50	
Rent on Peoria road,.....	92,570 00—	216,453 65
Balance,.....	\$ 306,963 80	

Annexed is a summary of the general balance sheet:

Capital,.....	\$5,603,000	
Funded debt,.....	1,397,000—	\$7,000,000
Surplus income,.....	545,000	
Total,.....	\$7,545,000	
Cost of road and equipment,.....	\$7,024,000	
Stock of company on hand,.....	101,000	
Cash items and fuel,.....	268,000—	\$7,545,000

[West. R. R. Gaz.]

KNOX & SHAIN,
Engineering and Telegraphic
INSTRUMENT MAKERS,
218 WALNUT ST., PHILADELPHIA.
(Two Premiums +₁₀ by Franklin Institute.)

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily for the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M., Springfield at 5:20 A. M., Quincy at 12:55 P. M., Palmyra at 2:15 P. M., St. Joseph at 12:30 A. M., Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M., Lafayette at 1:40 A. M. Chicago at 6:00 A. M., connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent.

C. B. COTTON, Cincinnati Agent.

General Railroad Arrangement. UNION TICKET OFFICES. LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

TRAINS RUN AS FOLLOWS	
SUNDAYS EXCEPTED	
DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M. 4:20 P. M.
Mail and Express.....	10:30 A. M. 10:30 P. M.
Columbus Accommodation.....	4:00 P. M. 10:30 A. M.
Morrow Accommodation.....	6:30 P. M. 8:00 A. M.

Cincinnati Hamilton and Dayton RAILROAD

Trains run as follows, SUNDAYS excepted:

DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M. 6:45 P. M.
Dayton, Toledo and Detroit.....	6:30 A. M. 9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M. 9:40 P. M.
Dayton and Richmond.....	2:00 P. M. 10:10 A. M.
Day, Toledo & Day, Huntsville.....	5:20 P. M. 10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M. 10:10 A. M.
Hamilton Accommodation.....	7:00 P. M. 6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M. 5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R.

Trains run as follows, SUNDAYS excepted:

DEPART.	ARRIVE.
Terre Haute and Lafayette and Chicago Mail.....	5:05 A. M. 11:10 A. M.
Indianapolis and Chicago Night Express.....	3:20 P. M. 11:50 P. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

ns run as follows, SUNDAYS excepted:

DEPART.	ARRIVE.
Evansville and St. Louis Mail.....	5:00 A. M. 10:45 P. M.
ymour Accommodation.....	3:00 P. M. 8:45 A. M.
Evansville and St. Louis Night Ex.....	5:00 P. M. 5:53 A. M.
One through train for Louisville and St. Louis Sunday venings.	

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES slower than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

P. W. STRADER,
General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

W. H. L. NOBLE,
General Ticket Agent Indianapolis & Cincinnati Railroad.

B. F. FULLER,
General Ticket Agent Ohio & Mississippi R. R.

McCALLUM, BRISTOL & CO., BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct McCALLUM'S PATENT INFLEXIBLE ARCHED TRUSS BRIDGE, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge and in the most approved and perfect manner. Estimates designing information, will please apply to the firm at their Office 99 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y. Ag. 26.

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Walnut St., CINCINNATI.

Special attention given to all kinds of work in our line, such as Show Cards in one or more colors, Maps, Bonds, Portraits; Certificates of Stock, &c., &c.

J. T. GRAPSETT,
ATTORNEY AT LAW,
OFFICE:
N. W. Cor. Walnut & Sixth streets,
my21 CINCINNATI

ERIE RAILWAY.
Great Broad Gauge, Double Track
and Telegraph Route
TO
NEW YORK, BOSTON,
AND ALL EASTERN CITIES,
CARRYING THE
Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; or JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago. feb. 6.

CHARLES MINOT, Gen'l Supt.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for

Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition, The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroad; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Baltimore, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

1861. 1861
FAST TIME.
LITTLE MIAMI
 (AND)
COLUMBUS AND XENIA
 AND
CINCINNATI, HAMILTON & DAYTON
RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Eaton, Richmond Indianapolis and West Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express.—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation.—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad for Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation.—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Richmond, Indianapolis, and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation.—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express.—From Cincinnati, Hamilton and Dayton Depot.—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Office, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,

General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Office.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
 No. 67 West 6th St. bet Walnut & Vine
 CINCINNATI O

W. MORRILL,

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of
 C. WASON & CO.)

CLEVELAND, OHIO,

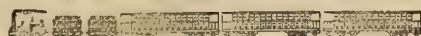
Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material. Orders respectfully solicited, with the assurance that pains will be spared to give entire satisfaction in all cases.

1862. 1862.
Pennsylvania Central R.R.
 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
 FOR SAFETY, COMFORT AND SPEED,
 TO ALL THE EASTERN CITIES!
 THE TRACK IS STONE BALLASTED
 AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
 (with close connections from Western Cities.)

ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
 AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE AND WASHINGTON.

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (430 MILES.)
 VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
 Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
 BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.
 ON NIGHT TRAINS TO
 Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, and to from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
 D. A. STEWART, Freight Agent, Pittsburgh.
 CLARKE & CO., Transfer Agents, Pittsburgh.
 R. C. MELDRUM & CO., Madison, Indiana.
 J. E. MOORE, Louisville, Ky.
 W. W. AIKMAN & CO., Evansville, Ind.
 R. F. SASS, St. Louis, Missouri.
 CLARKE & CO., Chicago, Illinois.
 W. H. & E. L. LANGLEY, Gallipolis, Ohio.
 G. B. NEAL, Parkersburg, Virginia.
 HALL & CO., Marietta, Ohio.
 H. S. PIERCE & CO., Zanesville, Ohio.
 McDOWELL & McCORM, Portsmouth, Ohio.
 R. MCNEELY, Marysville, Ky.
 J. P. JOHNSTON, Ripley, Ohio.
 JOHN TODD, Covington, Ky.
 G. L. HEATON, Cleveland, Ohio.
 R. C. MELDRUM, General Traveling Agent for the South and West.

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Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other. ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa. L. L. HOUGHT, Gen'l Ticket Agent, Philadelphia. H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

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 Chilled Railroad Car Wheel, Tyre,
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 MANUFACTURE
CHILLED WHEELS
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TYRES,
FOR RAILROAD CARS
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LOCOMOTIVE ENGINES.
 Orders executed promptly to any extent for their
CELEBRATED WHEELS.

Either Single or Double Plate,
 With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on
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A. BRIDGES & CO.

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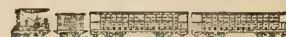
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No. 64 COURTLANDT STREET
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Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

through Distance 280 Miles;

42 Miles Shorter than any other Route

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M., 10:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth Street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without rebilling or transhipment.

JOHN BRANT, JR., Superintendent.

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent,

33 Randolph Street, under Sherman House, Chicago, Ills.

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STOCK BROKER,
 No. 21 West Third Street,
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LOW'S RAILWAY DIRECTORY

FOR 1861

CONTAINING

THE NAMES AND RESIDENCES

OF THE

PRESIDENTS, DIRECTORS

AND

OFFICERS

OF ALL THE RAILROADS IN THE

UNITED STATES

If they could be ascertained.
Published by James W. Low.

Price one dollar.

Sent postage prepaid by mail for one dollar
and twenty cents.A few copies only for sale at the office
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MATHEW BAIRD.

M. W. BALDWIN & CO.
ENGINEER'SBROAD AND HAMILTON ST.²

Philadelphia, Pa.

Would call the attention of Railroad Managers, and those
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LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for
which they may be required, by the use of one, two, three or
four pair of driving wheels; and the use of the whole, or
so much of the weight as may be desirable for adhesion;
and in accommodating them to the grades, curves, strength
of superstructure, and rail and work to be done. By these
means the maximum useful effect of the power is secured
with the least expense for attendance, cost of fuel, and re-
pairs to Road and Engine.With these objects in view, and as the result of twenty-
six years' practical experience in the business by our senior
partner, we manufacture five different kinds of Engines,
and several classes or sizes of each kind. Particular atten-
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workmanship of all the details. Our long experience and
opportunities of obtaining information enables us to offer
these engines with the assurance that in *efficiency, economy*
and *durability*, they will compare favorably with those
of any other kind in use. We also furnish to order Wheels
Axles, Bowling or Low Moor Tire (to fit centers without bo-
ring), Composition Castings for Bearings; every description
of Copper, Sheet Iron and Boiler Work; and every article
appertaining to the repair or renewal of Locomotive En-
gines.

419 y

CONTRACTS for Rails at a fixed price, or on com-
mission, delivered at an English port, or at a por-
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THEODORE DEHON,
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EDWIN J. HORNER,

SUCCESSOR TO

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WILMINGTON, : DELAWARE.

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SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

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and to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a *new style*, working upon the
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Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to gavel, and leaving no chain or
ridge on the under side, the economy of thread, and adap-
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the most successful and popular Family Sewing Machine
now made.At our various offices we sell at New York prices, and
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sew ordinary seams, hem, fell, quilt, gather, bind, and
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years.If Send or call for a circular, containing all particu-
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WROUGHT IRON

ARCH BRIDGES

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Corrugated Iron Roofs

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CORRUGATED SHEETS, OF ALL SIZES, constantly
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JAMES FOSTER, Jr. & CO.,
MATHEMATICAL AND PHILOSOPHIC-
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Engine and Car Axles, Pump and Piston Rods,

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Lewistown, Mifflin Co., Penn.

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This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron
hammered. The whole operation from ore to finished Iron
is conducted at our own Works
June 9.

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LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness
the best and latest improved

COAL OR WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works being located on the New York Central
Railroad, near the center of the State, possess superior
facilities for forwarding their work to any part of the coun-
try, without delay.

JOHN ELLIS, President.

WALTER McQUEEN, Sup't.

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ESTABLISHED 1821.

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MANUFACTURERS OF

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to definite lengths.Wrought Iron Welded Tubes—from ½ inch to
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S. F. M. TASKER,

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In use by 10,000 Merchants, Bankers and Railroad offi-
cers of the South and West. For sale by 1,000 leading Station-
ers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, JULY 3, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

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“ “ six months.....	110 00
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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrangements are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.
<i>Cincinnati, Hamilton & Dayton—</i>		
Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 P. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	10.10 A. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp. ..	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.10 A. M.
<i>Sandusky, Dayton & Cincinnati—</i>		
Morning Express.....	6.00 A. M.	5.40 A. M.
Bellefontaine Accommodation..	5.20 P. M.	6.45 P. M.
<i>Marietta & Cincinnati—</i>		
Mail.....	8.00 A. M.	10.10 A. M.
Accommodation.....	3.30 P. M.	5.20 P. M.
<i>Ohio & Mississippi—</i>		
Mail.....	5.05 A. M.	10.05 P. M.
Seymour Accommodation.....	3.00 P. M.	8.45 A. M.
Express.....	5.00 P. M.	6.53 A. M.
<i>Indianapolis & Cincinnati—</i>		
Mail.....	5.05 A. M.	11.10 A. M.
Chicago Express.....	3.20 P. M.	11.50 P. M.
<i>Dayton & Michigan—</i>		
Toledo, Detroit & Chicago Exp.	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.
<i>Cincinnati & Chicago Air Line—</i>		
Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.
<i>Cincinnati, Wilmington and Zanesville—</i>		
Morning Express.....	10.40 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.
<i>Antwerp Central— (City time.)</i>		
First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

RAILWAYS & THE NATIONAL TAX.

We have, through the daily papers, an exceedingly imperfect copy of the new National Tax Bill, which takes effect on the 1st of August. The only clauses affecting railway business that we can find, are the following:

Stamp Tax on Bills of Lading, 5 cents each,
Gross Receipts—Passengers, 3 per cent.

In addition to these there is a tax on new railroad iron of \$1 50 per ton, and on re-rolled rails of 75 cents. These seem to be the only taxes direct or indirect levied by the new bill.

The manner in which these taxes are assessed are as follows:

The manager of each railway shall, within five days after the end of each and every month after the law takes effect, make a list or return to the assistant assessor of the district in which he is located, stating the gross amount of such receipts for the month next preceding, verified by oath, and at the same time pay to the collector of the district the full amount of duties which have accrued on such receipts for the month. In case of neglect or refusal of the proper officer to make such return for the space of five days after the required time, the assessor or his assistant shall proceed to estimate the amount received, and the duties thereon; and for the purpose of making such assessment, or ascertaining the correctness of any return, the books of the company or manager shall be subject to the inspection of the assessor or his deputies if so requested.

In case of refusal or neglect to pay the duties assessed for the space of five days after they are due, the parties interested shall pay in addition a penalty of five per cent; and for any attempt at fraud they shall be liable to a fine of one thousand dollars for each offense, to be collected by a summary process.

The taxes assessed above may be added to the rates of freight or passage if companies see fit to do so, notwithstanding any agreements with other companies or laws to the contrary.

In addition to the monthly lists of freight and passage, the managers of railways are also required to furnish to the Internal Commissioner, within thirty days after each dividend and every six months thereafter, a return of all such dividends, verified by oath of the proper officer; and all railway companies are required to retain three per cent. of all such dividends for the use of the Government, and to pay over the same to the collector of the district at the time of making the return. The penalties for neglect or failure to comply with this section is five hundred dollars.

The stamps on bills of lading are to be in the form of postage stamps on adhesive paper, or printed on stamped paper furnished by the Government through collectors, postmasters, stationers and others. In applying the adhesive stamps, the person using them is required

to put his initials upon the stamp, and the date of using it. A failure to do so involves a penalty of fifty dollars.

The tax on passengers conveyed by street railways, is 1½ per cent, on gross receipts. Returns to be made in the same way as for steam railways.

It will be seen from the above, that the requirements from the railway companies are not very onerous, and can be readily complied with,—while the tax, if charged upon each passenger, will be so distributed through the community as to be entirely inappreciable. The additional fare between Cincinnati and New York will be about 65 cents, a matter of small importance to the passenger, but in the aggregate a vast revenue to the Government.

When we get an official copy of the law, we will, if necessary, give a more full and perfect summary of its requirements in regard to railways.

NORTHERN CENTRAL RAILROAD.

We have been favored with the seventh annual report of this company for the year ending Dec. 31, 1861. The report says:

It will scarcely be forgotten, that at the commencement of the fiscal year, 1859, the portion of the road below Bridgeport was worn out and the part between Bridgeport and Sunbury had never been completed; and further, there was a great deficiency of rolling stock—there being neither a sufficient number of passenger cars, freight cars or locomotives; and many of those that were upon the road were greatly out of repair.

The finances of the company, too, were in a deplorable condition. Since that time the affairs of the company have been steadily improving.

At the commencement of the fiscal year 1859, the indebtedness of the company was as follows:

Funded debt.....	\$4,545,800 00
Other liabilities, commonly called the floating debt.....	617,507 10
Total.....	\$5,163,307 10
From which deduct assets on hand.....	445,816 20
Leaving the net liabilities.....	\$4,717,490 90

The indebtedness of the company at the commencement of the fiscal year 1860, was as follows:

Funded debt.....	\$4,728,800 00
Floating debt.....	756,641 38
Total.....	\$5,485,441 38
From which deduct cash assets.....	568,158 87
Leaving the net liabilities.....	\$4,917,282 51

The indebtedness of the company at the commencement of the fiscal year 1861, was as follows:

Funded debt.....	\$5,040,300 00
Floating debt.....	543,650 07
Total.....	\$5,583,950 07
From which deduct assets.....	419 00 41
Leaving the net liabilities.....	\$5,164,669 66

The indebtedness of the company at the commencement of the fiscal year 1862, was as follows:

Funded debt.....	\$5,150,000 00
Floating debt.....	509,088 39
Total.....	\$5,659,088 39
From which deduct assets.....	\$5,169 99

And it leaves the net liabilities.....\$4,800,918 40

The amount due the sinking fund, as will be hereinafter represented, is not included in the above statements of floating debt.

To the task of improving the general condition of the road and remedying the deficiencies, the Board in 1859 turned their attention, and that policy has been continued to the present time. Accordingly large sums were expended, not properly chargeable to the road department for ordinary repairs of the road, or to the machinery department for ordinary repairs of cars and engines, or to the ordinary expenses of transportation; but as stated in a former report, to the cost of construction of the road, to the rolling stock account and to a special account of extraordinary repairs, rendered necessary by the dilapidated condition into which the road had fallen, and which should have been distributed over former years. During that year the following sums were expended not properly chargeable to the ordinary expenses of operating the road and keeping it in repair, to-wit:

Under the head of Construction, were charged—	
for work done.....	\$8,680 98
Ballasting.....	28,000 00
Engine and station houses.....	13,243 53
Engineering.....	2,456 34
Discount on sale of bonds.....	63,613 75
Interest on Construction loans.....	30,445 49

Making.....	\$146,430 09
For right of way and real estate, there was charged.....	32,692 36
On account of rolling stock, for four locomotives.....	\$34,750 00
Sixty-five house cars.....	37,700 00
Ninety-five gondolas.....	43,427 37
Passenger and baggage cars.....	5,402 00

Making.....	\$121,279 37
From which deduct the amount allowed for old locomotives, given in part payment, and for time cars sold.....	4,870 00
And it makes under this head.....	116,409 37
On account of building the telegraph line, there was expended.....	7,867 97
And there was expended for rebuilding bridges, renewing cross ties, for purchase of new iron, for rerolling old rails, and for tools, spikes, etc.....	104,557 24

Making a grand total of.....\$408,007 03

Thus it will be seen by a comparison with what has been stated before, that notwithstanding this large expenditure beyond the sum necessary for ordinary expenses, the net liabilities were increased only \$262,791 59.

During the year 1860, there were expended the following under the head of construction:

For bridge at Dauphin, \$75; scales on Canton Division, \$26—making.....	\$ 101 00
For discount on bonds.....	147,043 11
Rolling stock.....	5,546 00
Telegraph line.....	725 00

And the Superintendent reported in regard to the operations of the road for that year, that in order that the road might be worked with economy and regularity, and dispatch given to the business offering, it became necessary to expend over and above a fair allowance for regularly working and maintaining the property in a condition to meet the requirements of the public, as well as the expectations of those interested in its success, the large sum of..... 145,500 00

Making the grand total for that year.....	\$298 920 11
The increase in the net liabilities that year was.....	287,587 15

During the year 1861, the following sums were expended, to-wit;

For right of way.....	\$8,817 25
Engine house, etc.....	257 78
And the Superintendent reports that the extraordinary outlay in the Road department was.....	41,224 39

Making a total of.....\$50,329 43

The net liabilities this year were reduced below those of the preceding year \$363,951 26.

The Board regret that the financial embarrassments of the company have, heretofore, not only prevented the prompt discharge of all the interest obligations, but also the annual investments to the sinking funds. These arrearages have consequently been accumulating year after year, until they amount, with compound interest, according to the balance sheet, to the sum of \$167,133 87.

There are two sinking funds which the company are required to maintain, to-wit:

1st. For the loan of \$150,000, due October 1st, 1866.

2d. For the loan of \$2,500,000, due July 1st, 1885.

The act of the State of Maryland authorising the issue of the first named loan, provides that there shall be an annual appropriation of \$10,000 in cash, invested in securities, approved by the Treasurer of Maryland—such securities to be held by said Treasurer, in trust, until the maturity of the loan, when they shall be sold, and the proceeds applied to pay off the principal and interest of the bonds.

Four annual appropriations, with accrued interest, have, accordingly, been invested to Oct. 1st, 1855, in the purchase and deposit, as aforesaid, of \$20,000 Northwestern Virginia Railroad first mortgage bonds, guaranteed by the City of Baltimore; and of \$23,500 of Baltimore City six per cent. stocks of 1890, costing and representing value for redemption purposes to the amount of - - \$43,555 00

To which the accrued interest being added, - - - - - 16,612 50

Makes the total value of investments, - - - - - \$60,167 50

Six annual instalments to October 1st, 1861, with compound interest are therefore due, amounting to \$69,723 18, which being invested at par, would augment this sinking fund to \$129,890 68, a sum sufficient with its accruing interest, to liquidate the loan during the year 1864—more than two years before its maturity. In view therefore of this fact, it will be for the Board to consider, if practicable, whether it will not be the interest of the company, to invest a sum sufficient, but not more than will provide for the redemption of the loan at maturity, for by appropriating \$10,000 for the year ending October 1st, 1861, and annually thereafter, the same amount, until and including October, 1866, this will be fully attained.

The mortgage which secures the loan of \$2,500,000 provides that one per cent. of the amount of loan outstanding on December 20th of each year, commencing with December 20th, 1857, shall be annually paid in cash

to the trustees of the mortgage, to be invested by them in the bonds of this loan, whenever they can be bought at or less than par; otherwise to be invested in other stocks; the securities thus purchased to be held by them as a sinking-fund for the ultimate absorption and payment of said bonds and interest, and to be applied by them at maturity of said bonds to the payment thereof and interest thereon: the surplus, if any, to be paid to the Northern Central Railway Company.

Nineteen thousand dollars of the company's bonds, having a market value of \$11,020, have been delivered to the trustees, who have from time to time invested the accrued interest to July 1st, 1860, until the whole value of the fund carrying interest from that date was \$25,500, and cash on hand (including \$152 50 expended for legal expenses, not yet credited on the books of the company), \$490,000.

After crediting the above amount it will be found that, according to the balance-sheet of the Treasurer, there are instalments, with compound interest, due to December 20th, 1861, amounting to \$97,410 69.

This amount the Board feel confident can be paid during the present year 1862, as well as \$10,000, the whole sum, if found to be expedient, due on sinking-fund for loan of \$150,000.

The Board, anxious that every precaution should be adopted to secure the safety of the funds entrusted to the trustees, desire that each bond (of the company) and coupon, shall be stamped with a suitable device, representing that such bonds and coupons are set apart for the sinking-fund, and in no case are to be diverted therefrom.

Although the Board has facilitated stockholders upon the improved condition of the company, it is with regret that they have to state that the company in the past year encountered a serious disaster.

About the 20th of April, 1861, several of its bridges in Maryland were burned or otherwise made impassable. The secrecy and celerity with which the work of destruction was accomplished, made prevention impossible. The agents of the mischief were directed by the Mayor and Police Commissioners of Baltimore, and, as said, with the sanction of the Governor of Maryland: and for twenty-eight days the business of the road was interrupted. A careful estimate by the late Superintendent shows the damages thus sustained to have amounted to \$117,609 63.

In a suit brought by the State of Maryland to foreclose its mortgage, these damages were set up in bar of the State's claim to that extent, but the Court of Appeals has refused to allow them.

An application to the Legislature of Maryland might procure and ought to procure redress of this injury. The protection to property and reparation of its injury, are eminently due where the wrong has been perpetrated by officials of the highest position. Rights hardly merit the name where there is neither security for their preservation nor compensation for their destruction.

Soon after the bridges were destroyed, an armed force in the service of the State of Maryland, took possession of Calvert Station where our principal offices were established, and the officers and employees of the company could only have ingress and egress, by permission of the sentinels standing at the doors.

Under that state of things, and the excitement about the building consequent upon it, which seemed to render it impracticable to

carry on the ordinary business devolving upon those offices, and there being nearly fifty miles of distance between those offices and that portion of the road that could be operated, so that free communication could not be had between them; and moreover that the books and papers which were very valuable, not only to the company but to every class of persons having transactions with it, were not considered safe, the President directed the Treasurer to remove his office from Baltimore to Harrisburg, to remain there during the pleasure of the Board.

The Board subsequently approved the action of the President, and passed a resolution that until further notice, all regular meetings of the Board should be held at Harrisburg, and up to the present time the meetings have been held in that city.

The total earnings of the road for the past year, including the Wrightsville, York & Gettysburg Railroad, were \$1,417,977 07, derived from the following sources:

Freight,.....	\$ 695,450 57
Passengers,.....	289,761 98
Mails,.....	26,100 00
Express,.....	94,685 92
United States service,.....	346,835 49
Pennsylvania State service,.....	24,039 31
Sundries,.....	20,913 76

Total,.....\$1,417,977 07
The expenses were,.....681,832 50

Leaving the net revenue,.....\$ 736,144 86

It requires to pay the interest on the funded debt, including the annuity to the State of Maryland,.....\$309,000 00
To pay up the arrears of the Sinking Funds,.... 167,133 87
To pay annual investment this year (1862) to Sinking Fund,..... 35,000 00

Total,.....\$511,133 87
And in order that none of the investments before mentioned need be sold to pay off the floating debt remaining last year, there may be added (due allowance being made for contingencies and losses on the bills receivable), the sum of,..... 50,000 00

Making in all,.....\$561,133 87

The net revenue of 1861, as has been stated above, was \$736,144 86. Should the net revenue, therefore, for the year 1862 equal that of 1861, and there is every reason to believe it will, there will remain, after paying all proper demands upon the treasury, the sum of \$175,011.

The Board believe it to be the true policy of the company to finish the road and put it in complete order, to fully equip it with rolling stock, and erect suitable buildings for the protection of its engines and machinery; and that after the present year the company may commence paying dividends and maintain them regularly thereafter.

The Terre Haute and Alton and the Belleville and Illionstown Railroad Corporations have been reorganized under the name of the St. Louis, Alton and Terre Haute Railroad Company. A Board of Directors has been appointed, consisting of Messrs. Bayard, Sage, Tilden, Butler, Richardson, Clark, Griswold, and several gentlemen resident on the line of the road. The new first mortgage bonds will be issued next week and the week following, and consist of two classes, one called series A, bearing coupons for 7 $\frac{1}{2}$ cent interest, due 1st January and 1st July, and one called series B, with coupons due 1st April and 1st October. The second mortgage bonds will also be divided into classes, and bear coupons due February and August and March and September.

LA CROSSE AND BLACK RIVER R. R.

The La Crosse *Democrat* says, that the exploring party, Messrs. Spence, Bliss, Cramer, Barton and others, have returned from the survey of the railroad route from La Crosse to Black River Falls, via Stevenstown, and their report is much better than was expected. The distance is but forty-six miles, and the route very easy. The road bed can be built ready for ties at about half the cost usually incurred even in the West. Measures will be taken to push the matter right ahead.

The completion of this Railroad will be of the greatest benefit to La Crosse as the entire country through which it passes, and north of its terminus, Jackson county, of which Black River Falls is the county seat, has now 285,000 acres of land yet unentered! Of this, at least 190,000 would make excellent farms, if there were a means offered to ship the surplus produce raised, which now requires wagon or sleigh cartage of about fifty miles to convey it to a profitable market.

Again, the average amount of lumber yearly run out of Black River to La Crosse and lower ports is about 66,000,000. Much of this is cut in Clark county, north of Jackson, but manufactured at or this side the Falls, and then rafted. There are forty-one saw mills now running on Black river and its tributaries, and two more in course of erection. Clark county has 9, Jackson county 30, and La Crosse county 2. The largest are in Jackson county. The building of this road will at once make this city the point where all the supplies for these mills will be purchased—will give it much profitable business in freighting supplies and passengers, as well as in hauling the manufactured lumber. Besides, the iron mines of that section can then be profitably worked, and the natural result of this enterprise, as sure to follow as day follows night, will be a large addition to the wealth and population of this and northern counties and a large increase of the business of this city.

A meeting of the Directors of the Atlantic and Great Western Railway was held at Cleveland on the 22d ult., to take into consideration some matters connected with the local affairs of the line. The following members of the Board were present: J. Riblet, Galion; Dr. Bushnell, Mansfield; Judge Church, Meadville, Penn.; Hon. John Dick, Meadville, Penn.; F. W. Seymour, Ravenna; William Kent, Franklin Mills; S. Hayes, Hartford, Trumbul County; W. Streater, East Cleveland; J. Crowell, Ashland; J. W. Taylor, Warren.

Four thousand men are now at work on the road, principally upon the 40 miles between Correy, the present terminus, and Meadville, Penn. This portion of the road will probably be in running order within 30 days, when the

men will be put on the road between Meadville and the Ohio State line, which will also soon be in a condition for running.

The entire grading on the Racine and Mississippi Railroad, between Freeport and Savanna, is completed, and 15 miles of the iron are laid. The balance is being laid at the rate of one mile per day, the iron upon the ground.

COL. CHAS ELLET, JR.

Whatever estimates the new world may ultimately place upon the genius and acquirements of the late Col. Chas. Ellet, it can not be denied that he was always a willing contributor, according to his ability, to all projects relating to engineering; and did cheerfully, all he could, to advance the interests of a profession in which he felt the despoiled interests. The readers of the *Record*, will, no doubt, remember with pleasure his many, and excellent contributions to this paper, on various subjects connected with railway and other engineering, and lament with us that the facile hand that traced, and the ready mind that gave them birth, have been stilled forever. His works, whatever they may have been, must now stand as he left them, to the judgement of posterity.

It will be remembered, no doubt, that at the outbreak of the rebellion and for some time thereafter, Col. Ellet published several very severe strictures upon our means of naval warfare, and at a later day an article criticising in the strongest terms the conduct of the war, and the management of the General of in-Chief. These articles, however, produced but little apparent effect; but after the attack of Hollins famous ram "Manassas," on our fleet at the mouth of the Mississippi, he succeeded in getting permission from the War Department to build, or fit out a fleet of boats to act as battering rams in conjunction with the gunboats of the Mississippi. The success of this undertaking, which was frequently made the subject of ridicule, was complete in the destruction of the rebel fleet at Memphis. But in the hour of triumph, he received a chance shot which terminated his life—almost the only victim on our side, of one of the most novel, and important naval achievements of the age.

There was nothing very novel in Col. Ellet's steam rams, for they have been the subject of controversy for a quarter of a century; but their terrible efficiency was not proved until the memorable onslaught of the Merrimac, and the destruction of the rebel gun-boats before Memphis. Col. E., however, is none the less entitled to credit for this achievement; for it was only by the most indomitable perseverance, and amid discouragements that would have deterred almost any other man, that he procured the order for the construction of the rams. But he illustrated thereby a prominent trait in his character, namely—

the genius to plan, the talent to execute, and the power to command the assistance of others when his undertakings were too great for his unaided efforts. The names of Ellet and Ericsson will be mentioned in all time as the illustrators of a new system of naval warfare, and one that renders comparatively useless all the old systems and modes of defense, and places on an equality, as regards naval warfare all the leading powers of the earth.

In many of his projects Col. Ellet might be regarded as visionary;—as for instance, the construction of large reservoirs or lakes along the head waters of the Ohio, to supply a navigable stage in that stream during the summer months. His bridge across the Niagara, however, was no chimera; but has proved a great success in the hands of Col. Robbling. His speculations in regard to the delta of the Mississippi, and his memorable controversy with Col. Humphreys of the Engineers on the subject have considerable plausibility in them; but scientific men are much divided in opinion as to their merits; and whether the deposits at the mouth of the Mississippi are formed by subsidence of the silt from the river, or whether the alluvium brought down by the stream is first carried out into the gulf and thrown back by a sort of inland under-tow of the sea, will probably never be satisfactorily determined, and will most likely furnish food for volumes of argument, long after the propounder of the theory has been forgotten in connection with the subject.

IMPORTANT DECISION.—The Supreme Court of Iowa has just delivered a very important decision. It is to the effect that county and city subscriptions of bonds to railroad companies are illegal and void. The case decided was entitled "the State, on the relation, etc., of the Burlington & Missouri Railroad Company, vs. the County of Wappelo." The point decided (the opinion of the Court being unanimous and delivered by Judge Love), is that the Legislature of Iowa has never conferred upon the counties of that State the power to issue bonds in payment for stock in railroad companies, and that such bonds are therefore invalid. City bonds, of course, fall within the same principle. Decisions similar in principle to the above have already been made by Judge Love, of the U. S. District Court, and the question is now pending on appeal from Judge Love's decision, to the United States Supreme Court.

WESTERN RAILROAD GAZETTE.—We are happy to receive the first number of the W. R. Gazette in its enlarged form and new dress. We wish Bro. Fowler as many good things as his heart can desire, or that his capacious merits deserve. He promises, among other good things, to "strenuously labor to make the GAZETTE a full, reliable, useful and readable paper," and we guess he will do it.

THE RAIN FALL AND FLOOD IN THE ANTHRACITE REGION.

Last week we referred to the tremendous fall of rain which occurred on Wednesday, 4th instant.

On Monday and Tuesday there were intermittent rains, which on Wednesday terminated in a rain pour that lasted into the "middle watches of the night." The storm covered a large extent of territory, extending across Pennsylvania, Maryland and Virginia, though the scene of the severest visitation was along the watershed in the anthracite coal region, in a distance of an hundred miles on the map, between Pine Grove on the Swatara and Port Jervis on the Delaware.

Within the anthracite territory the main summit sheds the gifts of the rain clouds into the Lackawanna, the Susquehanna, and the Swatara, on the Susquehanna side, and into the Lackawanna, the Lehigh and the Schuylkill, all tributaries of the Delaware, on the Delaware side. The flood caused by the rains was most severe in the Lehigh, next on the Swatara, next on the Upper Delaware, and next and least severe on the Schuylkill. From the great Southern and Northern Anthracite fields all the tideward carriers were more or less flooded and injured, the damage done in some cases being especially severe to mechanical works and terribly destructive to human life.

Since the development of the coal trade the coal region has sustained no such visitation by flood, the flood of 1841 sinking into insignificance by a comparison of its effects with the wrecks made by the freshet of Thursday, 5th inst.

And as the greatest destruction of property on the day named occurred to the Lehigh Coal Company, we shall commence with that important and pioneer coal carrier.

The Lehigh river, in the distance that it is occupied by the works of the Lehigh Navigation Company, from its mouth at Easton to Stoddartville, 84½ miles, has a lockage of 1,297 feet. The Company's works are divided into three sections, two comprising slack-water and canal, and one, the upper section, consisting of a descending navigation for lumber.

LOWER SECTION, Easton to Mauch Chunk, 46 miles; lockage 361 feet; locks 46; dam, 8; height of dams 8 to 16 feet.

UPPER SECTION, Mauch Chunk to White Haven, 26½ miles, lockage 600 feet; locks 29; dams 20; highest dam, "Barn Door" No. 8 thirty eight feet from water to water, 58 feet from base to overfall; lift of highest lock thirty feet.

DESCENDING NAVIGATION, White Haven to Stoddartville, 12½ miles, lockage 336 feet; locks 3; dams 3; this section is for passing down lumber and has no ascending navigation.

From White Haven across to the Susquehanna at Wilkes Barre the Company own a railroad 20 miles long, over which coal is shipped to the canal at White Haven on the Lehigh, whence it is locked down to connecting canals leading to tidewater.

The principal points, however, where coal tonnage is put upon the canal are Mauch Chunk and Penn Haven, the first named distant 46 miles from Easton, the latter 84½ miles from Mauch Chunk and from Easton 54½ miles. From Easton to Penn Haven the lockage is 548 feet; locks 57; dams 26. From Penn Haven to White Haven distance 17½ miles; lockage 412½ feet; locks 18; dams 14.

Now, inasmuch as between White Haven

and Easton the distance is 72½ miles, the lockage 961 feet, the number of locks 75, and the number of dams 28, it results that, *forty three per cent* of the lockage is in the *twenty four per cent* of mileage between White Haven and Penn Haven. And hence it is contended that, instead of reconstructing the dams and locks between Penn Haven and White Haven, it would make a better working programme if the Company would extend their railroad down the Lehigh from White Haven to Penn Haven. This would give them a rail line from Wilkes Barre to Penn Haven 37½ miles long, and a canal navigation from Penn Haven to Easton 55 miles long. With a rail line extended from White Haven to Penn Haven, the Wyoming Valley would be put in direct rail communication with the Lower Lehigh Valley and with this city and New York.

How many of the river dams below White Haven have been carried away, or so washed around or sundered that the water does not run over the overfall, we do not specifically know; but on Thursday a gentleman direct from the scene of disaster informed us that, from White Haven all the way down to and including the Slate dam which is 46 miles below White Haven and 20 miles below Mauch Chunk, he knew of very few dams (one at Penn Haven) that remained whole and intact and that passed the water over its overfall; that some of the dams are washed out down to their foundations; that others are injured in their guard banks and combs and breasts, some in one way, some in another.

At the end of the deep level below Mauch Chunk, a work of masonry laid in cement and seemingly massive enough to defy any flood was swept away. At Penn Haven the water rose fifteen feet in three minutes, the reason of this sudden rise being the giving way of dams above, and the descent of the emptying pools in a rush of waters that carried destruction on its wave and left death in its wake; for the coming of the danger could not be signaled (the telegraph poles having previously succumbed to the storm) and in many places and cases there was no escape from it. Boats moored in pools, with crews and families on board, were torn loose and swept down upon the rushing current and wrecked and lost; whilst habitations along the river side were lifted from their foundations by the rising waters, and their inmates sent adrift and drowned.

What the damage done to the Company's works may amount to, we are unable to indicate. It is said that three months will elapse before the navigation can be reopened to Mauch Chunk. The Company, however, is wealthy, being owner of a magnificent coal estate, and can command means to reconstruct its line according to any plan that may be agreed upon. It is manifest though, that from the lower portions of the valley of the Lehigh, there will be urged, with plausibility and force, objections to the rebuilding of the river dams above Penn Haven, the reservoirs formed by the dams swept away on Thursday, 5th inst, having been the source and cause of the damage and loss inflicted upon property and life.

THE LEHIGH VALLEY RAILROAD.—The bridge upon which this road crosses the Lehigh river below Mauch Chunk was carried away, as also in whole or part were lesser structures farther down the river. In some places the track and roadbed were washed down into the river, and, altogether, much injury was sustained. About three weeks, it is said, will suffice to re-open the road to Mauch Chunk. This road is in able hands, and all

that can be done will be done with a promptitude that will attain the end sought.

THE BEAVER MEADOW RAILROAD.—On about nine miles of this road, between Penn Haven and Mauch Chunk, the damage done is serious, the road in some places having been washed down into the river; the Turnhole Bridge, an iron structure across the Lehigh, was carried off its piers and abutments, and lies in the river bed at right angles to its course when in place, its wrought iron parts twisted and bent and its cast-iron parts broken. The upper portion of this road was not injured, and on Monday next, upon the completion of the repairs to the Little Schuylkill Railroad, tonnage from Hazleton and its vicinity will be forwarded via the Quakake, down the Schuylkill Valley.

THE HAZLETON RAILROAD was injured nowhere except at the foot of the planes at Penn Haven, where the pockets and trestling and the bridge over the Quakake were carried away.

THE DELAWARE AND HUDSON CANAL COMPANY had their aqueduct across the Delaware at the mouth of the Lackawaxen, and, we believe, some smaller aqueducts in its vicinity carried away.

THE DELAWARE LACKAWANNA AND WESTERN RAILROAD suffered in a number of places from the carrying away of culverts and loss of embankment and roadbed, but at no one spot was the damage very serious.

THE SCHUYLKILL VALLEY.—The Philadelphia and Reading R. R. was not even for the brief period of a day embarrassed in its operations, nor did the Schuylkill Canal suffer anywhere in its dams and locks; the breaches in its banks were all between Schuylkill Haven and Reading. One week from to-day the repairs will be completed; the damage to the canal will not exceed \$25,000.

The Mine Hill and Schuylkill Haven Railroad sustained a slight injury in Mine Hill Gap; the Little Schuylkill Railroad will be in operation by Monday next; the Mahanoy and Broad Mountain Railroad lost a culvert (ten feet wide over a small stream) and some embankment; other lateral roads lost bridges and otherwise sustained damage, but not to serious extent.

THE SWATARA—THE UNION CANAL.—On the Union Canal, from Pine Grove to the Susquehanna, great destruction ensued from the giving way of some small mill-dams above Pine Grove, which was followed by the giving way of the canal dam at Pine Grove, the big dam fifty feet high in the gap in the Blue Mountain—and the Feeder dam, which jointly from their pools let down into the valley below a volume of water that carried off or greatly damaged all the structures met with before the Susquehanna was reached, except the massive brick viaduct upon which the Lebanon Valley Branch crosses the Swatara. This permanent work, built by Richard B. Osborne, C. E., withstood the flood and vindicated its builder, at the same time that it kept open the Lebanon Valley route from Harrisburg to Philadelphia. The Union Canal Basin at Middletown was considerably injured. One hundred thousand dollars, it is said, will be required to restore the works destroyed on the Union Canal. The Western Division of the line we are assured can be put in order without long delay; the Eastern Division is not damaged. The Branch Canal extending to Pine Grove it is supposed can hardly be rebuilt this present season.

Accompanying the destruction of property by the flood was an appalling loss of human life, two hundred persons, it is estimated,

having been drowned on the anthracite territory and in the valleys leading down from it. The damage done in dollars, too, swells into a total of millions.

In consequence of this flood coal has risen in price, the carrying lines to the great markets having at one swoop been reduced from six to one, the Philadelphia and Reading being the only one of the half dozen in operation this present week.

Soon, however, the Delaware, Lackawanna and Western Railroad will again be in use forwarding coal trains to tidewater; in one week navigation on the Schuylkill Canal will be resumed; and soon thereafter the Lehigh Valley Railroad and then the Delaware and Hudson Canal will be reopened. Lastly, at the end of three months, the Lehigh Canal will be in order to Mauch Chunk, when the six lines will all once more be in operation.

Meantime the obstructions in the sources of supply will keep the market scant and scarce of the staple fuel, and per consequence, better prices will rule, and the consumer will pay more than he paid last year, for his anthracite.—*U. S. R. R. and M. Register.*

UNITED STATES LIGHTHOUSES.

In the year 1851, the lighthouses of the United States were in a condition disgraceful to our country. Along the whole of an extremely exposed and dangerous coast, there were in all but 325 lights; of which one was ranked as of the 1st, two of the 2d, and 16 of the 3d order. But these were of the old reflector pattern, which had been long abandoned by the maritime nations of Europe for the refracting system introduced by Fresnel. Organization of the service there could scarcely be said to be any. The whole matter was under the control of one of the Auditors of the Treasury Department, whose other duties were quite as much as he could attend to; and, as the management of the lighthouses brought with it less political influence than any other branch of his duties, it was of course entirely neglected, except to give a favorite supporter a fat contract for furnishing oil in wasteful quantities at unheard of prices.

When we consider how important an efficient system of coast lights is, as well to the pecuniary interests of our merchants as to the character of the nation itself as one of the community of the civilized nations, we will easily understand that this state of things was bitterly complained of, and so in 1845, two intelligent officers of the Navy were, at the request of the Hon. R. J. Walker, then Secretary of the Treasury, detained to visit and examine the lighthouse systems of England and France; and afterwards, in 1851, another commission was appointed to examine into the lighthouse establishment of the United States. It will be seen that the matter was not hurried. But upon the report of this latter commission, Congress passed an act establishing the Lighthouse Board, consisting of "two officers of the Navy of high rank; one officer of the corps of engineers of the Army; one officer of the corps of topographical engineers of the Army; and two civilians of high scientific attainments, whose services may be at the disposal of the President; and an officer of the Navy, and an officer of Engineers of the Army as Secretaries."

The two civilians appointed on the Board were Prof. A. D. Bache, Superintendent of the Coast Survey, and Prof. Joseph Henry, Secretary of the Smithsonian Institution.

The propriety of the appointment of just such a board as is here provided for will be seen by a moment's reflection on the requisites of the service. The first point is to arrange the approximate positions of the lighthouses, so as to insure general security along the whole coast, as well as a special care for the safety of any peculiarly dangerous positions. This falls within the province of the Navy, although it would seem that it might be at least as well done by the Revenue Department, or by two merchant captains of the trade. The next point is the selection of the precise site for the lighthouse; and as this requires an intimate knowledge of the coast, both inland and within soundings; of the position, extent, and depth, of all shoals and banks, and a minute acquaintance with the force and direction of all the currents, both constant and temporary, in the vicinity of the locality, there is but one place in the whole country to which we can apply for the requisite information, and that is the Coast Survey. When the locality is determined on, the next point to be attended to is the erection of the tower, and this requires such thorough and extensive engineering ability, that not a few of the great engineering reputations of England have for their foundation the successful establishment of lighthouses in difficult positions. The next and most important point is the light itself, wherein are to be considered several problems: to obtain the most intense light; to concentrate it into a parallel or slightly divergent beam; to avoid throwing any part of it away in directions where it can be of no use, such as upwards, downwards, or landwise; to prevent as far as possible the absorption of it by the apparatus used for concentrating it; to give it such a character that it may be readily distinguished by the mariner, so that when he sees the light he may know exactly whereabouts on the coast he is. Now these are problems of physics; they lie neither in the province of the engineer, the mariner, nor the surveyor. They are problems whose solutions are being every day more and more perfected by observations and experiments and discoveries taking place in all parts of the civilized world. To meet this want, then, we require a man of high scientific ability and attainment, one who is accustomed to read all the scientific journals of the world, so that no discovery can escape him; and one who is himself able experimentally to test the correctness of results said to be reached, and to develop such new ideas as may occur to himself; and in addition, one who knows the abilities of the various scientific men of our country, so that he may employ their knowledge and facilities where it may be desired to use them. Such a man pre-eminently is Prof. Henry.

It appears, therefore, *a priori*, that the lighthouse board was judiciously constituted; it appears so still more clearly from the facts reported to the Senate in the document before us.

The number of lights has been increased from 325 in 1852 to 556 in 1858; the character of the lights has been improved by the introduction of all the last improvements, so that in place of being a disgrace to the nation, our system will now favorably compare with those of England and France; yet, notwithstanding this greatly increased number and efficiency of the lights, the cost of maintaining them was less in 1858 than in 1852 by \$184,720. The whole system has been organized, a proper superintendence established over the keepers, so as to insure the utmost efficiency and regularity in each light, a mat-

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.		48	\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.	65	380	13,111,800	10,781,833	566,070	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling.....	3,000,000	5			
do do										Mortgage.....	2,500,000	6	82	1825	
do do										".....	700,000	6	84	1830	
do do										".....	1,125,300	6	90	1875	
do Washington Branch.....	Md.		30	1,650,000						".....	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind.		118	1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7	55	1860	
do do										2d ".....	160,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	122½	68	1,950,950	1,040,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.		75	1,101,432	1,428,000		104,809	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	132½	96	3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	37,000	6	100	1864	
Central Ohio.....	Ohio.		137	In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7	62½	1861	
do do										2d ".....	600,000	7	60	1864	
do do										1st ".....	600,000	7	60	1865	
do do										3d ".....	500,000	7		1865	
do do										4th ".....	1,365,000	7		1876	
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	100	1865 & 1870	
do do										2d ".....	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.		222	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d ".....	1,545,000	7			
do do										3d ".....	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d ".....	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		194	2,297,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S.F. Gen'l 1st Mortgage.....	1,250,000	7	80	Feb. & Aug. 1	
do do										2d ".....	3,600,000	7	82½	Feb. & Aug. 1	
do do										3d ".....	2,000,000	6	24	May 1.	
Chicago and Rock Island.....	Ills.	58½	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	105	1870	
Chicago, Burlington and Quincy.....	"	80	138	4,689,340	4,614,513		1,514,428	761,830		Cons. 1st Mort. S.F. " 2d " S.F. 1st Mor. Chi. & Aur. 2d " S.F. 1st " Cent. Mil. Tract 2d "	2,172,000 813,000 390,000 303,400 392,000 215,000	6 6 7 7 8 8	106½ 106½ 106½ 106½ 106½ 106½	1860 1867 1869 1864 1868 1868	
do do															
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.		60	2,155,800	1,356,000		644,328	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d ".....	950,000	7	100	1869	
Cincinnati Wilmington & Zanesville ..	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d ".....	532,000				
do do										3d ".....	104,000				
Cleveland and Mahoning	Ohio.	68½	1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,509			80		
do do										1st Mortgage.....	850,000	7			
do do										2d ".....	400,000	7			
do do										3d ".....	341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	116½	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L. 2d " M. L. or 1st Ex. 3d 2d Ex..... 4th 3d Ex.....	810,000 1,188,000 1,165,000 1,154,000	8 8 8 8	100 91 80½ 64	1860 1873 1865	
do do										1st Mort. Jun. 1st Div. 2d " " 2d Div. 2d " " 2d Div. 1st " Tol. Nor. & Cleve 2d " " 2d Div. Junction Income.. C. & T. Income.....	359,000 263,000 265,000 521,000 293,300 44,500 300,000	7 7 7 7 7 7 7	65 65 62 75 75 1864 1864		
do do															
Cleveland and Toledo.....	Ohio.	48	148	3,343,800	3,650,570	196,413	919,971	493,956	May 31, 1861.	1st Mortgage.....	519,000				
do do										2d ".....	564,000				
do do										3d ".....	303,000				
do do										Dividend.....	272,700				
Cleveland, Columbus and Cincinnati..	Ohio.	116½	135	4,746,100	519,000	4,201	1,255,003	664,898	Dec. 31, 1861.	1st Mortgage.....	519,000				
Cleveland, Painesville and Ashabula..	"	125	98½	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 13, 1860	1st Mortgage.....	564,000				
do do										2d ".....	303,000				
Columbus and Xenia.....	Ohio.	87½	54½	1,490,000	290,700	50,500	See I.	Miami.							
Columbus, Piqua and Indiana.....	"	103	103	In hands of Receiver.	2,176,666	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"		142	2,176,666	2,512,000					2d ".....	2,212,000	8			
Dayton and Western.....	Ohio.		38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000			50	
Detroit and Milwaukee.....	Mich.		186	No report						1st Mortgage.....	2,500,000	7		1875	
do do										2d ".....	1,000,900	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.		111	No report											
Dubuque, Marion and Western.....	"		51	No report											
Eaton and Hamilton.....	Ohio.		36	469,762	738,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.		132	966,061	1,219,100	249,668	124,140			2d ".....	400,000				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	181,000				
do do										2d ".....	1,000,000				
Galena and Chicago Union.....	Ills.	72½	121	6,038,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000				
do do										2d ".....	1,520,000				
Great Western	Ills.		175	1,600,000	2,391,000		455,943	181,529	May 31, 1861.	1st Mortgage W. D. 1st " E. D.	1,041,000 1,350,000	10 7			
Green Bay, Milwaukee and Chicago...	Wis.		84	400,000	No report										
Greenville and Miami.....	Ohio.		32	300,000	473,000	75,000	63,141	13,573		Land Mortgage.....	5,000,000			26	
Hannibal and St. Joseph.....	Mo.		206	1,041,986	10,554,000	220,306	993,907	512,933	Sept. 1, 1860.	Mortgage Conv.....	1,354,000			47	
do do										1st Mortgage.....	927,000	6		99	1873
Hartford and New Haven.....	Conn.		62	2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	4,000,000	7			
Hudson River.....	N. Y.	48	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	2,000,000			06	180
do do										2d ".....	1,840,000	7		91	1875
Illinois Central.....	Ills.	63½	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	28,000	7		64	1868
do do										Construction.....	12,885,000	7		95	1875
do do										".....	4,115,000	6		96	1875
do do										Debentures.....	42,740	7			
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	60,000	7			
do do										2d ".....	578,000	10			
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,234	140,689	448,858	230,834		Income.....	38,700	1			
do do										1st Mortgage.....	500,000	7		85	1866
do do										2d ".....	400,000	7		85	
Indianapolis Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,234	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort. 1st Mortgage.....	200,000 649,954	7 7		68	
do do										2d ".....	314,000				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report								
Iowa.....	Ohio.		13	118,665	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st	29,000	7	75	1861	
do										2d	392,000	7	70	1873	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st	260,000	7			
do										2d " Conv.....	1,000,000	7			
do										3d "	600,000	7			
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	90,000		89		
do										2d " E. D.	1,000,000				
do										1st Land Grant W. D.	4,000,000		21		
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.	29		514,433	130,000		104,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883	
Little Miami.....	Ohio.	61					1,330,030	529,981	Jan. 1, 1862	City Loan.....	174,000	6			
Louisville and Frankfort.....	Ky.	65		1,169,59	394,519		245,910	98,679	June 30, 1861	1st Mortgage.....	248,000	7			
do										1st "	2,000,000	7			
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,020	Dec. 31, 1860.	1st Mortgage	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.	205		8,561,213	196,408	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv.....	2,500,000	7		1868	
do										2d "	2,000,000	7			
do										3d "	1,500,000	7			
do										Sterling Income.....	333,000	4			
Michigan Central.....	Mich.	88	284	6,057,784	7,963,429	125,000	2,126,699	910,169	May 31, 1861	Domestic	928,617	6	92½	1872	
do										1st Mortgage Sterling	467,483	6	84	1869	
do										1st " Conv.	500,000	8	96	1860	
do										1st " unconv.	250,000	8	104½	1869	
do										1st " Dollar Conv.	2,598,000	8	108½	1869	
do										1st " S. F. Conv.	4,153,000	8	95	1882	
Michigan South'n & North'n Indiana	Mich &	28½	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. So.	991,000	103	95	1860	
do										" Nor. Ind.	985,000	103	100½	1861	
do										" Goshen Line.	1,168,000	103	100½	1868	
do										S. F. Toledo	2,850,000		42	1885	
do										2d Mortgage	2,465,000			1877	
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8			
do										2d "	200,000	7			
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8			
do										2d "	600,000	8			
Milwaukee and Prairie du Chien.....	Wis.	27½	192	4,944,000	2,556,000		683,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	93	1891	
do															
Mississippi and Missouri.....	Iowa,	55		No report						1st Mortgage Conv.....	1,000,000	7			
do										2d " S. F.	400,000	8			
do										Oskaloosa Div.	1,425,000	7			
do										Land Grant.....	7,000,000	7	102½		
New Jersey.....	N. J.	13	34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000				
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860						
New York and Erie Pref.....	N. Y.	66½		Sold under mortgage			5,590,916	1,979,402	Sept. 30, 1860	1st Mortgage.....	3,000,000	7	105		
do										2d "	4,000,000	7	105		
do										3d "	6,000,000	7	99		
do										4th "	4,900,000	7	86		
do										5th "	1,792,500	7	88½		
New York and Harlem Pref.....	Conn.	44	138	5,717,190	6,055,752	.....	1,142,251	433,716	Sept. 30, 1860.	1st Mortgage.....	2,950,000	7	102½	1873	
do										2d "	1,000,000	7	101	1864	
New York and New Haven.....	Conn.	18		3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,001	7	94	Dec. 1, 1866	
do														Oct. 1, 1875	
New York Central.....	N. Y.	95½	556	24,000,000	14,613,005	none.	7,369,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,929,000	6	100½	May 1, 1883	
do										Mortgage.....	3,000,000	6	106½	June 15, 1864	
Northern Central.....	Md.	138		2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,066,500	6			
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,550,000	6			
Ohio and Mississippi, Eastern Div.....	Ohio & Ind	192		Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6			
do										3d "	316,995				
do										Construction.....	4,637,920				
Ohio and Mississippi, Western Div.....	Ills.	148		.....	3,292,403		No report			Income.....	3,591,183				
Pacific.....	Mo.			3,190,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000				
do										" S. W.	2,800,000	6			
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	Construction.....	4,500,000	6	104½	1888	
do										1st Mortgage Conv.....	4,905,000	6	98½	1875	
do										2d "	2,319,000	6		1875	
do										2d " Sterling.....	1,957,440	6			
Peru and Indianapolis.....	Ind.	74		1,100,090	820,000	80,000	No report			State Works.....	7,200,000	5	89		
Philadelphia, Wil. and Baltimore.....	Del.	98		5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6	99½	1884	
do										Improvement.....	119,000	6		1863	
Pittsburgh, Ft. Wayne & Chicago.....	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,757,273	2,335,323	761,555	June 30, 1861	1st Mort. O. & P.	1,000,000	7		1865	
do										2d "	750,000	7		1866	
do										1st " O. & I.	1,000,000	7		1872	
do										2d "	389,000	7		1873	
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000	7			
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.						
Sandusky, Dayton and Cincinnati ..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	127,000	10		1856	
do										"	997,000	7		1866	
do										"	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,285,200	132,003	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886	
Scioto and Hocking Valley.....	Ohio.	56		401,975	500,000	100,000	110,200	53,100							
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000				
do										2d "	450,000				
Steubenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d "	900,000	7		1865	
Terre Haute, Alton and St. Louis.....	Ills.	208		No report						1st Mortgage Conv.....	1,000,000	7	10	1862	
do										2d " Conv.	2,000,000	7	85	1868 & 1870	
do										1st " Bel. & Ill.	517,000	7		1873	
Terre Haute and Richmond.....	Ind.	100	73	1,381,450	230,000	none.	377,092	216,183	Dec. 1, 1861.	1st Mortgage.....	240,000	7	91	1866	
Toledo, Wabash and Western.....	Ohio & Ind	5½	243	2,123,500	5,996,049	52,389	233,545			1st Mortgage.....	3,400,000	7		Aug. 1, 1865	
do										2d "	2,500,000	7		Nov. 1, 1878	
do										Mort. Coupons.....	96,049	7		1890 to 1865	

ter which can hardly be properly appreciated except by the mariner.

'Let us hope, then, that seeing how admirably their experiment has succeeded and is succeeding, and having regard to the fact that this wicked rebellion has extinguished 125 lights, many of them of the highest importance, which must be immediately replaced,—let us hope that Congress will not be induced to make any change whatever in the light-house department, until they are thoroughly satisfied that there is an evil to be remedied, and that the remedy which they propose to apply is the right one.—*Journal Franklin Institute.*

THE COMMERCIAL BANK OF CANADA VERSUS THE GREAT WESTERN RAILWAY.

Perhaps the most important trial for the recovery of money—taking into account the magnitude of the sum at stake—ever brought in the law courts of this country has just been determined before a Kingston jury. The Commercial Bank of Canada, having its head offices in the city wherein the suit was instituted, sued the Great Western Railway Company to recover some \$942,000, with interest, amounting together to over one million of dollars, alleged to have been advanced to the Great Western to be expended on the Detroit and Milwaukee Railway. The investigation extended over a period of three days, during which time the principal officers of the two railways and the bank were subjected to long and severe examinations, and a vast mass of documentary evidence—consisting, for the most part, of correspondence which had passed between the parties—was received and read. We have no space to go into a detail of the side issues raised and the various circumstances collateral to and bearing upon the main question in issue. That question was, to whom was the credit given—to the Great Western, to the Detroit and Milwaukee, or to Messrs. Brydges and Reynolds individually. Mr. Brydges being the managing director, and Mr. Reynolds the financial director, of the Great Western, became also, when the Detroit and Milwaukee passed under the control of those for whom they were acting, respectfully president and vice president of the latter company. To equip and place the Detroit and Milwaukee in running order, the English share holders of the Great Western road voted two sums, one of £150,000, the other of £100,000 sterling, to be expended by Messrs. Brydges and Reynolds as their trustees. The Great Western was at that time doing its banking business with the Commercial Bank, and on the appropriation of the £150,000 being voted by the English shareholders for the purpose stated, Mr. Reynolds proposed to Mr. Ross, bank manager at Kingston, and to Mr. Park, its cashier at Hamilton, at an interview he sought with them in the Rossin House, Toronto, in 1857, to open an account for the expenditure about to be made on the Detroit and Milwaukee Railway. An arrangement was entered into under which the account was opened, the cash advanced by the bank, to be repaid from the traffic receipts, and by exchange drawn by the Great Western in Canada, on the Great Western in England for the £150,000 appropriation. The agreement was simply of a verbal character. Twelve months afterwards—the account of the Detroit and Milwaukee having been in the meantime considerably overdrawn, and suspicions being entertained by the bank as

to the solvency of the concern—application was made to Messrs. Brydges and Reynolds for a written assurance as to liability. These gentlemen at once replied by a letter, in which they stated that the Great Western would cover all over drafts on the Detroit and Milwaukee account. Thereupon further cheques were honored by the bank, until the over draft amounted to the sum of \$942,000, as already stated. A demand being made on the Great Western for payment, they denied their liability, alleging that the money had been advanced to the Detroit and Milwaukee, which was then in a position of pecuniary difficulty. When shown their letter they asserted that it was nothing more than a letter of guarantee of the extent of the £150,000, which further sum of £100,000 had been voted subsequently to the £150,000. On the trial, it was stated by Messrs. Ross and Park, that at the interview in Toronto it was distinctly understood that the credit was to be given to the Great Western, whilst Mr. Reynolds was equally positive that it was agreed the liability should be assumed by the Detroit and Milwaukee. And in support of this latter view, letters were put in by the counsel for the Great Western, showing that when writing to Messrs. Brydges and Reynolds on Great Western business they addressed them as the managing and financial directors, and when on matters pertaining to the Detroit and Milwaukee, as the president and vice president. The books of the bank were also produced, with a view to prove that the original entries were made in the name of the Detroit and Milwaukee; and on the other hand, the person who made the charges in one of the ledgers was examined so as to show that the absence of the words, "on account of the Great Western Railway," arose through a clerical error, and he afterwards supplied the omission by writing the line over the first entry at the top of the page. Another branch of the Great Western case was, that the money was drawn for the two companies on two entirely different sets of cheques. As a set off to this, the bank pointed to the circumstances that a schedule was submitted to them by Messrs. Brydges and Reynolds, setting forth the income and assets of the two companies, not separately but jointly. These are but a few, but they are the chief of the many points submitted on both sides in the course of the trial. The jury found for the bank on the matters of fact, leaving the law objections to be disposed of hereafter in the court above.—*Railway Review.*

GIGANTIC CANALS IN INDIA.

From Calcutta we learn that, in anticipation of the future extensive cultivation of cotton in British India, it is intended to form a number of canals for the irrigation of the districts adapted to the growth of the plant. The general scheme, proposed by Colonel Dickens, under the sanction of the Government, consists in the construction of two main canals leading from a dam, to be fed by the river Soane. These will extend in opposite directions to a distance of ten or twelve miles, when they will branch off into two fan like systems of irrigation channels, extending on one side to the Kurumnassa and Ganges, and on the Poon Poon and Ganges. There will also be navigation channels for facilitating the transmission of the crops to Benares, to the mouth of the Kurumnassa, to Arrah, and to Patna. The aggregate dimensions will be 681 miles of irrigation, and 145 of navigation channels, or in all 826 miles. Through these waters will flow at a speed of two miles

per hour, whilst the supply will yield 3,121 cubic feet per second. The dam is proposed to be formed on the plan of the Madras Delta Works. The chief difference consisting in the depth of the undersunk foundations, which Colonel Dickens in his plan suggests, namely, two rows of locks, 20 ft. each in depth, whereas the wells at Madras range from 7 ft. to 9 ft. only. The principal impediment to the carrying out of the works is their enormous probable cost. The colonel however, has entered into lengthy calculations to prove that the outlay would be amply compensated for by the enhanced productiveness of the land to be irrigated, and it is likely that a portion, at least, of the scheme will soon be commenced. As to its complete fulfilment we apprehend that that will depend upon the future phases which the civil war in America may exhibit. The present condition of our own manufacturing districts should plead eloquently for the increased growth of cotton in India, and we should imagine that Lord Elgin could not more worthily inaugurate his succession to the Government-Generalship than by paying immediate and practical attention to the momentous subject.—*London Mechanic's Magazine.*

WATERPROOF GLUE.—Fine shreds of india rubber, dissolved in warm copal varnish, make a waterproof cement for wood and leather. Take glue, 12 ounces, and water sufficient to dissolve it; then add 3 ounces of rosin, and melt them together, after which add 4 parts of turpentine. This should be done in a water bath, or in a carpenter's glue-pot. This also makes a very good waterproof glue.—*London Chemical News.*

DURABILITY OF HEMLOCK.—In laying pipes to supply a water station on the top of the Broad Mountain, in Schuylkill County, on the line of the Mahoney and Broad Mountain Railroad, we found it convenient to make use of the dam, and to follow the ditch originally made by the Danville and Pottsville Railroad Company, 32 years ago.

To our surprise, we found the hemlock trees which had been bored for pipes, in a perfect state of preservation, whether submerged or surrounded by moist earth. The bark was still adhering, and the sapwood presented that rosy hue seen in freshly felled hemlock. Wherever, on the contrary, the surroundings were dry, the timber was decayed.

The pipes varied in depth beneath the surface of the ground from 1½ to 2 feet. They were in excellent condition for over 1,000 feet in a continuous line.—*Journal Franklin Institute.*

MISSISSIPPI & MISSOURI RAILROAD.—At the annual meeting of the stockholders held in Chicago a few days since, the following Directors were elected: Gen. John A. Dix, Charles Tottle, Jacob Wetmore and F. Tows of New York; Nathan Peck of New Haven, Conn.; H. Price, J. Scott Richman, J. B. Grinnell and E. Cook of Iowa.

Gen. Dix was appointed at the same meeting President, and H. Price, Secretary.

This is a continuation of the Chicago & Rock Island Railroad. Efforts are being made to extend it to Grinnell, some thirty miles farther, the present season. S. C. Durant is the contractor and has a large force at work grading, etc.

AUDITING CLAIMS.—Messrs. Nathaniel Marsh of the Erie, G. W. Carr of the Fort Wayne, and W. H. Clements of the Little Miami Road, have been appointed a Commission to audit the claims of the Baltimore & Ohio Road against the General Government. They meet in Washington on the 30th inst.

ILLINOIS SOUTHERN RAILROAD.—The Lawrenceville *Globe* says such arrangements have recently been made with other railroad companies as to insure the completion of the first twenty-five miles (Lawrenceville to Mt. Carmel) during the present season; that Messrs. Stanton have just closed a contract that will enable them to commence delivering and laying iron immediately. It also provides for an amount of rolling stock sufficient to do the business of the road (I. S. R. R.) It decides that the iron can be procured and delivered as fast as the grade is prepared to receive it.

SUGAR RIVER VALLEY RAILROAD.—The contract for grading and bridging this road from Madison to Poynette has been let to Joseph Parkens of Madison, for \$15,000. Mr. P. is an old contractor, and a man of great energy. The work will be prosecuted to an early completion. The balance of the road between Poynette and Portage will also be let in a few days.

By a circular of June 16th from the agent of the Baltimore and Ohio Railroad we learn that the Harper's Ferry Bridge being substantially replaced, the Baltimore and Ohio Railroad Company are now prepared to transport goods in any quantity with promptness and dispatch, at low rates of freight, to all points West and Southwest. The President and Directors authorize a guarantee against loss or damage from military seizure, which is inserted in through bills lading. The Government having given positive assurance that the route, hereafter, will be so fully and effectually guarded and protected against any further incursions of the enemy, induces us to confidently solicit your patronage as heretofore."

The May earnings of the Terre Haute and Alton Road show a very large gain on last year. They are \$112,400; 1861, \$51,000; increase, \$61,400.

The Dayton and Michigan Railroad earned, for the year ending April 1st, 1862, \$400,168 37, an increase over the year previous of \$25,165 78, which is a very favorable result. The Company have recently purchased commodious depot grounds, and erected grain elevators, which have already had a happy influence on the receipts of the road, April and May showing some \$6,000 increase over the corresponding months of last year.

MORRIS & ESSEX RAILROAD.—The annual meeting of the Morris and Essex Railroad was held at Newark on Wednesday, June 18th., when the following report of the business of the road for the year 1861 was made:

RECEIPTS.		
Passengers.....	\$124,624 50	
Freight.....	78,595 01	
Mails and dries.....	7,764 06	\$210,984 01
EXPENSES.		
Paid for repairs of road, building bridges, &c....	31,545 62	
Repairs of engines and cars.....	29,478 48	
Wood oil and waste.....	19,112 25	
Operating the road and transporting passengers and freight.....	43,466 47	
Salaries and insurance.....	7,246 56	121,949 41
Balance.....		\$89,034 60
Balance of the interest account amounts to.....		19,886 32
Two dividends have been paid amounting to.....		81,946 00

The balance sheet of the Company is as follows:

Capital stock.....	\$1,157,800 00
Funded debt.....	340,100 00
Contingent fund.....	20,191 12
Total.....	\$1,517,991 12
Cost of roads and its appendages.....	\$1,627,362 52
Capital stock Newark and Bloomfield Railroad Company.....	55,000 00
Capital stock Telegraph Company.....	2,000 00
Wood on hand paid for.....	6,180 10
Cash and cash items.....	67,148 60—\$1,757,991 12

RACINE & MISSISSIPPI RAILROAD.—The managers of this road say it will certainly be opened during the present year to the Mississippi river. The Kenosha, Rockford & Rock Island Railroad will be equipped for business. These roads will be important tributaries to local business of the Milwaukee & Chicago Railroad, as a large portion of their grain must go to Milwaukee as a commercial necessity.

—The receipts of the Toledo and Wabash Railroad for the third week in June have been as follows:

	1862.	1861.
Passengers.....	\$5,037 32	\$3,449 65
Freight.....	21,777 02	12,914 22
Total.....	\$27,814 94	\$16,363 87
Increase.....		11,461 07

—The St. Louis, Alton and Chicago Railroad earned from June 16 to 23d, inclusive:

	1862.	1861.
Passengers.....	\$4,410 03	4,007 09
Freight.....	17,570 56	8,620 38
Sundries.....	855 83	815 33
Total.....	\$26,836 42	\$14,442 80

Increase in 1862.....	\$12,593 62
Total this month to date.....	68,244 56
Total since 1st January.....	504,526 79
	424,681 97

—The earnings of the Chicago and Northwestern Railway for the week ending June 21 1862, were:

Passengers.....	\$5,647 86
Freight.....	20,349 33
Mails, Express etc.....	615 82
Total.....	\$26,634 03
Corresponding week, 1861.....	19,122 18
Increase in 1862.....	\$7,471 85

The aggregate increase thus far in June is \$21,214, which is at the rate of \$350,000 per annum. As nearly all increase is profit, the road is now evidently earning a large surplus over the interest on all its funded debts.

MONETARY AND COMMERCIAL.

The unknown condition for the past week, of our military status, has to a very considerable extent put a stop to monetary transactions. Lenders do not want to lend, and borrow do not want to borrow. Things will assume a more settled shape in a few days, and business follow in its wonted channel. The July settlements are being very generally satisfactorily arranged, and there is a strong feeling of hope and confidence in the future. Stocks of all kinds are in a "fluctuating state," and the quotations of today are no criterion of the condition of the market to-morrow. The excitement in the great money center has been intense, and securities have been kicked about like a football.

The exchange market has not varied since our last meeting quotations, which are:

	BUYING.	SELLING.
New York.....	1/2 dis.	par.
Boston.....	1/2 dis.	par.
Philadelphia.....	1/2 dis.	par.
Baltimore.....	1/2 dis.	par.
Gold.....	8 1/2 prem.	9 1/2 prem.
Silver.....	3 prem.	5 prem.
Demand Notes.....	3 prem.	
7 3/4 do.....	5 prem.	

Flour has a few inquirers at 3 90 for superfine, but a good merchantable article cannot be bought for less than \$4. Extra has a range of \$1 10 to \$1 25 for known brands.

Wheat is offered freely. There is more demand for it at low figures. Prime red an white is selling at 83@93c.

Corn is higher and selling at 37c.

Oats are held at 36c., but sell for 35c. in bulk.

Rye has a good market at 70c.

Whisky is 35c. with a fair demand.

The *Tribune* of Tuesday says of the stock market: The whole market was unfavorably affected, and but for the moderate amount of stock pressing for sale still lower points would have been touched. After the Board the market continued heavy, and at the Second Board prices were generally 1/4 to 1/2 cent lower than in the morning. Reading was an exception, under a firm market in Philadelphia. Governments were steady, without transactions, excepting in 7.20 cent Treasury Notes, which sold at 104 1/2. The shares were in nearly every case lower. After the session there was a strong feeling, and a recovery in prices of about 1/2 cent in the leading franchises. The rumors from Washington were favorable and although not generally believe, yet with the natural reaction which follows a rapid decline, were sufficient to change the tendency of the market, and at the close the movement was upward, with but few stocks offering.

GREAT PUMPING ENGINES.—The quantity of water pumped up daily for the city of London is 150,000,000 gallons. Of this enormous quantity 79,000,000 of gallons are pumped by single acting steam engines. One of these engines when working at full power throws 8,000 gallons per minute to a height of 140 feet. The water thus raised is conveyed into London by cast iron pipes 36 inches in diameter. The cylinder of this engine is 112 inches in diameter, and weighs 36 tons.

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.
TUBE CLEANERS, Steel Wire and Whalebone BRUSHES.
Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enamelled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warming Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Piazza Greenhouses, Offices, &c.

**KRUPP'S
CAST STEEL**
RAILWAY AXLES & TIRES.
Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,
28 Platt Street, New York

KNOX & SHAIN,
Engineering and Telegraphic
INSTRUMENT MAKERS,
218 WALNUT ST., PHILADELPHIA.
(Two Premiums by Franklin Institute.)

**CHICAGO, GREAT WESTERN AND
NORTH-WESTERN LINE—INDIANA-
POLIS AND CINCINNATI SHORT-LINE**



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati daily for the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 9:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M. Chicago at 6:00 A. M., connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars. Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omni-buses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent.

C. B. COTTON, Cincinnati Agent.

The approximate earnings of the Pittsburg, Fort Wayne & Chicago Railroad Company, during the month of May ult., compared with the same period of last year were as follows:

From freight.....	\$ 189,505 28	\$ 137,354 26
passengers.....	75,997 49	61,146 03
express matter.....	2,700 00	2,740 00
mails.....	7,825 10	7,825 00
rent of railway, ..	7,083 33	7,083 33
rents.....		157 75
miscellaneous.....	500 00	234 54
Total.....	\$ 274,521 10	\$ 216,500 91
Earnings from Jan. 1st to April 30th.....	1,146,397 05	955,142 20

Total earnings to May 31st, \$1,420,918 16 \$1,171,643 11
Increase for May, 26 per cent.; average increase to May 31st, 21½ per cent.

General Railroad Arrangement.
UNION TICKET OFFICES.
LITTLE MIAMI AND COLUMBUS
AND
XENIA RAILROAD.

TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:30 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton
RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day, Toledo & Day, Huntsville.....	5:20 P. M.	10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Terre Haute and Lafayette and Chicago Mail.....	5:05 A. M.	11:10 A. M.
Indianapolis and Chicago Night Express.....	3:20 P. M.	11:50 P. M.

Ohio and Mississippi Railroad.
CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

ns run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
uville and St. Louis Mail.....	5:40 A. M.	10:45 F. M.
ymour Accommodation.....	3:00 P. M.	8:45 A. M.
uville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.
One through train for Louisville and St. Louis Sunday evenings.		

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omni-buses call for passengers as usual.

P. W. STRADER,
General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

W. H. L. NOBLE,
General Ticket Agent Indianapolis & Cincinnati Railroad.
E. F. FULLER,
General Ticket Agent Ohio & Mississippi R. R.

J. T. CRAPSETT,
ATTORNEY AT LAW,
OFFICE:
N. W. Cor. Walnut & Sixth streets,
my21 CINCINNATI

ERIE RAILWAY.
Great Broad Gauge, Double Track
and Telegraph Route
TO
NEW YORK, BOSTON,
AND ALL EASTERN CITIES,
CARRYING THE
Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DONLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.
Feb 6.

CHARLES MINOT, Gen'l Sup't.

Baltimore and Ohio Railroad
RE-OPENED!



This great national thoroughfare is again open for

Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition, The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT, Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Trouble upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

J. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Ag't, Baltimore, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

1861. 1861
FAST TIME.
LITTLE MIAMI
 AND
COLUMBUS AND XENIA
 AND
CINCINNATI, HAMILTON & DAYTON

RAILROADS.

On and after SUNDAY, Nov. 10. 1861, Trains depart as follows:

7:30 A. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express.—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation.—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation.—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Richmond, Indianapolis, and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation.—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express.—From Cincinnati, Hamilton and Dayton Depot.—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 3:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Office, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,

General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
 No. 67 West 6th St. bet Walnut & Vine
 CINCINNATI O

W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of
 C. WASON & CO.)

CLEVELAND, OHIO,

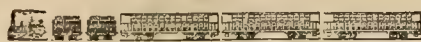
Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material. Orders respectfully solicited, with the assurance that pains will be spared to give entire satisfaction in every respect.

1862. 1862.
Pennsylvania Central R.R.
285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
 FOR SAFETY, COMFORT AND SPEED,
 TO ALL THE EASTERN CITIES!
 THE TRACK IS STONE BALLASTED
 AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA

(with close connections from Western Cities,
 ALL CONNECTING DIRECT TO NEW YORK,

THROUGH PHILADELPHIA,
 AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (430 MILES,
 VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
 BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.

ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "PA. PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
 D. A. STEWART, Freight Agent, Pittsburgh.
 CLARKE & CO., Transfer Agents, Pittsburgh.
 R. C. MELDRUM & CO., Madison, Indiana.
 J. E. MOORE, Louisville, Ky.
 W. W. ATKMAN & CO., Evansville, Ind.
 R. F. SASS, St. Louis, Missouri.
 CLARKE & CO., Chicago, Illinois.
 W. H. & E. L. LANGLEY, Gallipolis, Ohio.
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 HALL & CO., Marietta, Ohio.
 H. S. PIERCE & CO., Zanesville, Ohio.
 McDOWELL & McCORM, Portsmouth, Ohio.
 R. McNEELY, Maysville, Ky.
 J. P. JOHNSTON, Ripley, Ohio.
 JOHN TODD, Covington, Ky.
 G. L. HEATON, Cleveland, Ohio.
 R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
 L. H. HOUPPT, Gen'l Ticket Agent, Philadelphia.
 H. M. HOUSTON, Gen'l Freight Agent, Philadelphia.

BUSH & LOBDELL.
Chilled Railroad Car Wheel, Tyre,
 —AND—
Railroad Machine Works,
Wilmington, Delaware,
 MANUFACTURE

CHILLED WHEELS

—AND—
TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the
 Most Reasonable Terms.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLAND STREET
NEW YORK.

ALBERT BRIDGES.

JOEL C. LANE

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

through Distance 280 Miles;

42 Miles Shorter than any other Route

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C., H. and D. Depot, at 7:30 A. M., 3:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the office, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth Street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without rebilling or transhipment.

JOHN BRANT, Jr., Superintendent.

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent,

33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON,
STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and takes collection

LOW'S RAILWAY DIRECTORY

FOR 1861

CONTAINING

THE NAMES AND RESIDENCES

OF THE

PRESIDENTS, DIRECTORS

AND

OFFICERS

OF ALL THE RAILROADS IN THE

UNITED STATES

If they could be ascertained.

Published by James W. Low.

Price one dollar.

Sent postage prepaid by mail for one dollar and twenty cents.

A few copies only for sale at the office of the Railroad Record.

WRIGHTSON & CO. 167 Walnut Street.

N. W. BALDWIN,

MATHEW BAIRD.

M. W. BALDWIN & CO.
ENGINEER'S

BROAD AND HAMILTON ST.

Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

419 y

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned

THEODORE DEHON,
no1 10 Wal Broadway, New York

EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



LOCOMOTIVE & RAILROAD
CAR SPRING
MANUFACTURER,
WILMINGTON, : DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky.,

Lafayette, Ind.,

Indianapolis, Ind.,

Columbus, O.,

Dayton, O.,

Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being alike on both sides, impossible to unravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.

Feb 12.

WM. SUMNER & CO.

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WROUGHT IRON

ARCH BRIDGES

-AND-

Corrugated Iron Roofs

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.

Spt. 2.

MOSELEY & CO.

JAMES FOSTER, Jr. & CO.,
MATHEMATICAL AND PHILOSOPHICAL
INSTRUMENT MAKERS,

S.W. CORNER FIFTH AND RACE,

Cincinnati Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

H. TWITCHELL.

JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co. Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase. A 2-4 m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works June 9.

THE SCHENECTADY

LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

-AND ALSO, TO-

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, President.

WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1 1/4 to 10 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from 1/2 inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas, Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—from 1/2 to 24 inch diameter, and branches for same, &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS,

THOS. T. TASKER, JR.,

CHAS. WHEELER,

S. F. M. TASKER,

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MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

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JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroad officials of the South and West. For sale by 1,000 leading Stationers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, JULY 10, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

the space occupied by ten lines of Nonpareil	
square, single insertion.....	\$1 00
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
column, single insertion.....	5 00
“ “ per month.....	10 00
“ “ six months.....	40 00
“ “ per annum.....	80 00
“ “ page, single insertion.....	15 00
“ “ per month.....	25 00
“ “ six months.....	110 00
“ “ per annum.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrangements are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	10.10 A. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	8.10 A. M.
Eastern Night Express.....	10.00 P. M.	5.40 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.10 A. M.
Marletta & Cincinnati—		
Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.
Ohio & Mississippi—		
Mail.....	5.05 A. M.	10.05 P. M.
Seymour Accommodation.....	3.00 P. M.	8.45 A. M.
Express.....	5.00 P. M.	6.53 A. M.
Indianapolis & Cincinnati—		
Mail.....	5.05 A. M.	11.10 A. M.
Chicago Express.....	3.20 P. M.	11.50 P. M.
Dayton & Michigan—		
Tol. & Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.
Kentucky Central— (City time.)		
First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marletta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

IRON RAILWAY SLEEPERS.

The great India railway, extending across the peninsula from Belloor to Madras, upwards of 400 miles, has recently been completed. Several sections of this road are laid with iron sleepers; and we learn from the last report of the company, that the managers are extending their iron sleepers, but whether with a view of replacing all the wooden ones, we are not advised:—neither have we any clear data as to the advantages of the iron sleepers over the wooden ones. We should judge, however, that as timber is very scarce on the peninsula especially in the south part of it, that iron would prove the cheaper material in the end; especially in view of low price of labor in that country and the rapid decay of timber when exposed to the action of the heat and moisture of tropical climates.

Whether iron will ever be used in this country to any extent for sleepers is very doubtful. In some sandy districts exposed to high winds, a form of cast iron sleeper somewhat in the shape of a flattened or extended letter **A** might be adopted to good advantage. Such a sleeper would hold firmly the sand beneath it; and by its shape add greatly to its stability. Across long extents of prairie, such sleepers might be found economical, especially on the plains west of the Missouri, and on the line of the Pacific Railway—now happily an entity by the passage of the act of Congress giving a charter and a grant of the public lands.

The extent of the timber in this country, and the high price of capital, will for many years prevent any extensive application of iron for sleepers—if indeed it be ever used for that purpose. Kyanised, or more properly mineralised, wood will always be found the cheaper, and we think the better article. Wood properly charged with a solution of the chloride of zinc—a cheap salt, and a cheap and simple process—will be found to possess great hardness, and durability three times greater than wood unprepared; and with all the advantages of strength, firmness and elasticity.

ILLINOIS RIVER RAILROAD.—The general agent, Mr. Cook, informs the *Peoria Transcript* that the early completion of this road from Peoria to Jacksonville is now placed beyond any doubt. The part of the road between this city and Pekin will, as we stated a few days ago, be entirely completed in time for the coming State Fair, and the gap between Virginia and Jacksonville will be speedily finished. At Jacksonville, connection will be made with the Jacksonville & Alton road, the work upon which is now being vigorously prosecuted. So that before winter sets in, the people of St. Louis may expect to have direct communication with Peoria.—*Western Railroad Gazette*.

TRE PRESENT CONGRESS.

It is quite common to find fault with Congress for the delays, defeats and postponements of important public measures. Of this sort of criticism the present Congress has had its full share. These strictures, however, are not always just. If we look at the acts passed by the present Congress, we shall find some of the most important measures ever passed by any Congress that ever assembled. At the head of these is the Homestead bill; and next the Pacific Railway bill. These two acts alone would be sufficient to immortalize any set of men. But in addition to these there are many others of vast importance, such as the Treasury Note bill, by which the people have been given a National currency, by which they have secured all the benefits of a national bank without its dangers. Within the past day or two they have passed another important act, so far as Pennsylvania, Virginia, Ohio, Indiana, and Kentucky are concerned—namely, the Steubenville railway bridge across the Ohio river. This bill not only empowers the Steubenville Company to build a bridge over the Ohio, but gives any other Company the right to do the same, under the same restrictions. The bridge, if constructed without a draw, must have an unobstructed headway of ninety feet above low water mark, with a width of channel of not less than 200 feet between the piers. If built with a draw, the space on either side of the first must be not less than 100 feet, and this draw to be kept constantly open, except ten minutes preceding the time when trains may be due, and all roads using such bridges are to be used as post roads, and to charge no higher rates for mails, munitions, etc., belonging to the United States, than is charged on other lines. This is a very important measure, and one that must produce most beneficial results on the railways terminating on the Ohio.

There are other important measures before Congress, such as the bankrupt law and others, which, if passed, will fill the measure of their glory.

The St Louis, Alton and Chicago Railroad earned from June 24 to 30th, inclusive:

	1862.	1861.
Passengers.....	\$6,479 00	5,037 59
Freight.....	12,684 91	8,955 22
Sundries.....	816 33	815 33

Total.....\$19,979 24 \$14,768 14

Increase in 1862.....	\$5,211 10
Total this month to date.....	\$8,922 10
Total since 1st January.....	431,652 33
Military earnings Jan. 1st to May 31st.....	87,293 13

Total.....\$518,947 46

The details of the earnings of the Galena and Chicago Railroad Company for the week ending June 30 are:

	1861.	1862.
Freight.....	\$27,327 10	\$45,503 10 Inc....\$18,236 00
Passengers..	5,924 86	9,062 93 Inc.... 3,138 07
Mails, etc....	1,136 54	1,200 00 Inc.... 113 46

Total..\$34,388 50 \$55,876 03 Inc....\$21,487 53

For the month 1861.....\$162,823 22

For the month 1862..... 215,708 48

Increase.....\$52,885 26

Corrected earnings previous month.. \$158,194 03

CHICAGO & ROCK ISLAND R.R. CO.

ANNUAL REPORT.

The report of the Chicago and Rock Island Railroad Company for the nine months ending 31st March, 1862, (the official year having been made to terminate at that date instead of the 30th June,) gives the following as the gross earnings of the road, from all sources, from July 1st, 1861, to March 31st, 1862, being nine months: From passengers \$254,071 12; from freight \$757,144 47; from mails, etc. \$43,488 81. Total \$1,054,704 40—an increase over the corresponding months of last year of \$160,079 26.

Expenses for the same time (9 months,) including extraordinary repairs..... 531,386 86

Leaving net earnings..... \$523,317 54
Cost of new works..... \$35,853 12
Taxes..... 11,408 84
Legal expenses..... 2,287 19
Interest on bonds for 9 months..... 73,132 50
Rent on Peoria road..... 93,759 00 216,453 65

Balance..... \$306,963 89

There has been expended upon the road, which is properly chargeable to construction, \$43,186 17. Of this amount, \$7,311 05 is included in the item of repairs; the remainder, \$35,875 12, is put down as the cost of new works.

Repairs of Track.—The new materials placed in the track during the past nine months are as follows: 60,657 new ties \$20,111 40; 249 tons of new rails, \$9,439 72; 825 tons rails rerolled, \$21,344 08; 73,124 lbs. wrought-iron chairs, at 4½ cts., \$3,123 88; 8,026 lbs. wrought-iron fish-bars, for rail joint, 115,346 lbs. cast-iron chairs, at 2 cents per lb. \$2,306 92; 19,276 lbs. bolts, for cast-iron chairs and fish bars, \$963 80; 156,650 lbs. rail spikes, at 3 cents per lb., \$4,954 23; 13,476 rails repaired in Company's shops, averaging per rail 64 cts., \$8,737 34.

The chairs now used are much more expensive and much better than those formerly used. The whole number of employees upon the road averages 1,135, at an average monthly cost of \$30,307 45. Last year the average was 1,158, at an average monthly cost of \$30,250. The Company have 59 engines, all in good working order; two of which are in the service of the Illinois River Railroad Company. Of this number, 32 have been in the shop during the past year, and thoroughly repaired.

Among the principal items of new materials used on the locomotives are the following, viz: 44 new Low Moor tyre, 8 American Low Moor tyre, 6 Chilled Low Moor tyre, 13 driving wheels, 4 Washburn tyre, 3 engines altered to coal burners, 5 new steam chests, 5 new cylinders, 7 pilots, 5 cabs, 4 trucks, 7 tender frames, 1 engine frame, 13 flue sheets, 75 copper flues.

In order to keep the stock of cars good, the Company have added during the past year six new stock cars, and twenty-five new box freight cars, built in the Company's shop, with improved iron trucks, and costing \$600 each. Also five passenger cars and twenty freight cars have been rebuilt and painted, and made as good as when new. All of which is in-

cluded in the item of car repairs. The whole number of miles run is 765,949, and the cost per mile run for each locomotive is 19 cts., a decrease of 3 cents per mile from last year. The same table shows the cost of oil, waste, tallow, fuel, and repairs of engines, making the total expense per mile run, including new works and extraordinary repairs in the expenses, 75 cents per mile. Less construction and extraordinary expenses and taxes, 68 cents per mile.

The proportion of expenses to earnings is, including new works, extraordinary repairs and expenses, 55 per cent. Less new works, legal expenses and taxes, 50 per cent.

It will thus be seen that our expenses are gradually decreasing, both in the aggregate as well as their proportion to the earnings. This is owing in some measure to the improved condition of the road, by substituting permanent works in the place of those more temporary and perishable. The saving from this cause will be more apparent as these works progress.

The amount of wood delivered at the stations upon the road is 36,124 cords, at an average cost of \$2 71 per cord.

In our last annual report the loss on the Illinois currency was estimated at \$40,350 40. At that time much of this currency was on hand, the value of which could not be accurately ascertained, and the loss had to be estimated. Since that time the currency has been disposed of, and the loss accurately charged over, which makes it \$26,551 46; \$13,798 94 less than was estimated in our last report.

The total amount of freight transported over the Chicago and Rock Island and Peoria and Bureau Valley Railroads, for the nine months ending March 31st, amounts to 570,288,866 lbs., and the whole number of loaded cars was 36,648, viz: Going Westward, 12,330; going Eastward, 24,318. The average tonnage to each loaded car 7 tons.

The whole number of passengers carried over the road for the nine months ending March 31st, was 148,829. The number going East, 76,168; the number going West, 72,660.

The number of soldiers transported over the road, included in the above, was 10,384: Carried East, 7,323; carried West, 8,061.

Railroad Bridge.—The total number of pounds transported across the Mississippi Bridge for the nine months ending March 31st was 198,891,540 lbs.: Going West, 64,853,658; going East, 134,037,982.

The number of loaded cars passing for the same period was 13,254: Going East, 8,460; going West, 4,794.

The total number of foot passengers crossing the bridge was 66,616: Going Eastward, 33,362; going Westward, 33,254.

The total number of steamers passing the draw of the bridge for the nine months ending March 31st was 306: Going North, 152; going South, 154; total number of rafts, 121.

Balance to credit July 1, 1861.....	\$421,702 64
Earnings, as above.....	1,034,704 40
	\$1,476,407 04
Interest on bonds, July 9, 1861.....	\$42,145 00
Rent of Peoria Branch to July 31, 1861.....	62,500 00
Three per cent. dividend Dec. 20, 1861.....	168,000 00
Interest on bonds Jan. 9, 1862.....	48,895 00
Rent of Peoria Branch to Jan. 31, 1862.....	62,500 00
Operating expenses.....	531,386 86
Paid taxes.....	11,408 84
Legal expenses.....	5,287 19
Balance, March 31, 1862.....	540,444 15

	\$1,476,407 04
Capital stock.....	\$5,600,000 00
Mortgage bonds.....	1,397,000 00
Suspense account.....	2,746 02
Unpaid coupons.....	2,000 00
Profit, balance of income account.....	540,444 15

	\$7,545,220 17
Cost of road and equipment.....	\$7,545,220 17
1,015 shares company's stock.....	101,500 00
Sundry small balances.....	2,522 75
Railroad Bridge Co.....	20,000 00
Fuel on hand.....	31,009 70
Iron and materials on hand.....	29,134 14
Due from Illinois River R.R. Co.....	20,409 10
Post Office Department.....	9,210 61
Rent of grain house.....	2,818 32
Miss. & Mo. R.R. (since paid).....	9,066 17
General freight office.....	18,511 85
Bills receivable.....	2,765 91
Cash in hands of Cashier, Chicago.....	35,581 83
Balance of cash, cash items and uncollected bills in hands of do.....	87,145 29
Cash in hands of treasurer.....	151,508 25

\$7,545,220 17

President—Henry Farnham, Chicago.

Directors—T. C. Durant, F. H. Tows, David Dows, C. W. Durant, E. W. Dunham, Nathan Peck, John B. Jervis, Henry Farnham, John F. Tracy, R. A. Forsyth, T. S. Faxton, E. Cook.

Treasurer—E. W. Dunham, New York.

Secretary—Francis H. Tows, New York.

Superintendent—John F. Tracy, Chicago.

Assistant Superintendent—W. H. Whitman, Chicago.

Cashier—Frank D. Sherman, Chicago.

LAP OF SLIDE-VALVES.

The lap adopted in English locomotives is larger than in ours, seldom less than $\frac{1}{2}$, and often $1\frac{1}{2}$. There is sometimes a lead of $\frac{3}{8}$, and generally 5-16. The inside lap seldom exceeds 1-16, and generally is nothing; hence the lead on the exhaust is large—from $\frac{1}{2}$ to 19 16. The consumption of fuel is much less than ours; Holby and Colburn, in their work on *Permanent Way and Coal Burning*, state it at little more than half, and ascribe the difference to the superiority of their tracks.

Mr. Hedden, Locomotive Superintendent of the New Jersey Railway, keeps an account of the consumption of every engine under his charge. This account shows that the engines with long lap valves in all cases use less fuel than with short laps; and in some cases the difference is so great as to indicate that the track is not the greatest cause of undue consumption of fuel. When it is considered that on some roads the fuel costs more than all the rest of the engine expenses, it must strike even the most opinionated that we ought to examine carefully before we decide definitely that the great difference between our practice and the English is wholly in our favor.

Two engines that draw light trains of equal weight, and two that draw heavy trains of equal weight, with wood, consume as follows: Engine with cylinders 15 by 20, lap of valve $\frac{3}{8}$, cost per mile 10.3 cents; engine with cylinders 13 by 20, lap 7-16, cost 13.1; engine with cylinder, 14½ by 22, lap 1 inch heavy train, cost 14.3; engine with cylinder 16 by 22 lay 11-16, train, cost 18.3. Here is a difference of 20

to 21 per cent in the cost of wood, in favor of the longest lap. In one case the most economical engine has the largest cylinder; in the other it has the smallest cylinder. Other engines exhibited differences on the same side; but these are selected as being nearly of equal size, and differing very little except in the valves. Mr. Hedden ascribes the difference wholly to the distribution of steam.

In coal-burners on this road the same result appears in favor of the long lap. The short lap, in some cases, is preferred, because it makes an engine "smart," enables it to "pick up its train quick," and ascend a severe grade without stalling. On the other side, a long lap engine sometimes can not start a train without help; can't get up steam quickly; and may be stalled on a grade with a heavy train. The locomotive Great Britain, described in Clark's *Railway Machinery*, can not admit steam beyond two thirds of the stroke, hence one cylinder may have a vacuum behind it, while the other has a leverage of only one third of the length of the crank, and the tractive force in that case will be but a third of the minimum tractive force of an engine with no lap on its valves. Steam rail cars, and steam carriages, that have to start their whole loads at once, are very often unable to start, on grades on which they can run easily when in motion; while some engines without lap have been able to start trains that they could not continue to draw. Mr. W. S. Hudson informs us that he built an engine, many years ago, that would get up a long grade with a heavy train, by working until she started, and then stopping until the pressure was raised sufficiently to keep her in motion. This was due to a cross-head valve motion, concentrated by means of slots in the arms of the rock-shafts, the effect of which was to produce a very sudden and quick throw of the valve while it was at the dead point.

But these conveniences and other advantages of the short lap do not compensate for a difference of three or four cents per mile in the fuel, and for a corresponding expense in the repairs of boilers. If an engine is to stop every mile, this kind of smartness may be desirable; but if she is to run ten miles in the least time, and with the least cost, it is accordant with the experience above referred to, to say that the valve should not have less than an inch lap.

Mr. Walter McQueen used to give $\frac{1}{4}$ inch inside lap to freight engines; but for years past he has given no inside lap, and finds that they work better and more economically without it. The timely release of steam, even in slow-running engines, is found to have advantages that more than compensate for the loss of the effect of expansion which attends an early release. Now outside lap gives inside lead, which is wanted, as some think; while others would avoid it both on account of its releasing the steam before it has yielded all the power that should be got from its expansion, and on account of the compression which results from inside lead.

These differences of opinion should be compared with the fuel accounts, and with the repairs, and the work done by the engines, considering their mileage and their stops.

Long-lap valves have an enormous pressure on their backs, and long travel, and a friction that has by some been computed to consume a twentieth part of the whole power of the engine. To lessen this loss balance-valves have been tried, but have not yet got much into use. Probably the effects of reversing, the drawing of smoke into the cylinders and steam-chests, and the cutting of

valve-seats, by the dust, have told in the repairs of complex valves more than the repairs of plain valves and seats.

The piston-valve patented by Mr. Thomas S. Davis, and applied by the Jersey City Locomotive Works on a considerable number of stationary and propeller engines, with satisfactory results thus far, seems to offer a solution of this difficulty of excessive friction incident to valves of long lap and travel.

The objection—as many deem it—of compression, is, we think, shown to be of little weight by the diagrams exhibited in Clark's work, and by his reasoning upon them. The power expended in compression may be considered as expended in making steam for the next stroke; and the cushioning saves more friction than it causes, when the engine runs fast—which is the only time when there is much compression. Besides this, the steam detained in the cylinder makes a smarter blast than is got when there is little compression; this has been proved in cases when inside lap has been given to engines that did not make steam well—it has improved their steaming. But more outside lap, producing equal compression and freer exhaust, would have been equally effective on the blast, and had the other advantages that appear to have contributed to the economy of fuel on the English railways, and on the New Jersey engines that have the largest laps.

TRADE OF THE PORT OF N. Y.

The course of our foreign trade during the past month has been eminently satisfactory. In April, a tendency was apparent for the imports to gain upon the exports which, in the present condition of the country, was hardly a movement to be desired. This tendency, however, is reversed, and we find the exports gaining on the imports. Still, there is a large disparity between the imports and the produce exports, necessitating a considerable shipment of specie to cover the balance.

IMPORTS AT NEW YORK FOR THE MONTH ENDING MAY 31.

	1860.	1861.	1862.
Ent'd for consump'n,...	\$10,515,411	\$2,889,558	\$8,091,120
Ent'd for warehouse'g,...	4,436,660	5,842,313	4,600,920
Free goods,.....	1,845,020	2,730,568	1,446,093
Specie and bullion,....	96,060	3,468,812	110,388

Total imports,....	\$16,893,151	\$14,949,261	\$14,248,521
Withdrawals,.....	2,455,067	1,606,464	3,730,232

These figures indicate a decidedly healthier tone of business than prevailed at the same period of last year. The imports then were beginning to show the effect of the apprehensions attendant on the war. The imports for May, exclusive of specie, were only about eleven and a half millions. After twelve months' experience of rebellion, however, the fever has abated, and we find the imports of last month reaching nearly fourteen and a quarter millions, which is almost an average figure. The entries for warehouse are very little above those of 1860, being about 30 per cent. of the whole import, while the entries at the same period of last year were 50 per cent. This gain is a symptom of the convalescence of trade.

The largeness of the receipts for customs duties is specially worthy of note. The receipts for May reached the extraordinary sum of \$4,716,354, against less than a million for the corresponding month of last year, and not quite two and a half millions in 1860. This amount was collected on \$11,820,000 of merchandise thrown on the market; making an average duty of 48 per cent. For the last six months, the revenue from customs have av-

eraged nearly four million dollars per month; at which rate the whole income from this source would amount to nearly fifty millions a year.

EXPORTS FOR THE MONTH ENDING MAY 31.

	1860.	1861.	1862.
Domestic produce,....	\$5,812,190	\$10,535,709	\$9,837,693
Foreign merchandise,...	538,191	747,986	829,768
Specie and bullion,....	5,529,936	128,900	5,164,636

Total exports,.....	\$11,880,317	\$11,732,595	\$15,832,097
" exclusive of specie, 6,371,381		11,603,695	10,667,461

The exports of produce show an excess of those of April amounting to nearly two million dollars. Compared with May last year, the shipments are less by about a million, though more than for May, 1860, by four millions. Twelve months ago, we were exporting almost no specie. During the past month we exported \$5,164,636. This appears a large amount, but it is less by nearly half a million dollars than the exports for the same month of 1860. Much alarm has been expressed in some quarters at the recent outflow of gold. The truth is that the shipments for the last three months have been but little over those for the same period of 1860, as will appear from the following comparison:

	1860.	1862.
Export of specie in March,....	\$2,381,653	\$2,471,233
" " April,.....	2,995,512	4,037,675
" " May,.....	5,529,936	5,164,636
Total,.....	\$10,907,101	\$11,673,544

We present as follows a summary statement of the total imports for the first eleven months of the fiscal year, to-wit:

1859-60,.....	\$214,558,337
1860-61,.....	211,751,517
1861-62,.....	136,624,104

This shows a large decrease for the fiscal year, as compared with the two preceding years.

The exports of produce for the same period have been as follows, to-wit:

1859-60,.....	\$61,942,037
1860-61,.....	107,917,443
1861-62,.....	117,715,057

This is a very gratifying exhibit, showing that the exports from the port during a period of severe civil war have exceeded those of the largest year of peace by ten millions of dollars.—*N. Y. Economist.*

COAL.

The following very interesting paper was read by ROBERT CHARLES PATTERSON, Esq. C. E., before the Civil and Mechanical Engineers' Society. The author, after a brief introduction on the importance of coal to Great Britain, said that he proposed considering the subject he then brought before them in three ways—geologically, chemically, and commercially.

The *Geological Formation* in which coal is found is known by the term carboniferous, or mountain, limestone. It occurs between the magnesian limestone above and the old red sandstone beneath. The mountain limestone forms the base of the series; above this limestone is the millstone grit, which is, however, only a local development; next in order come the coal measures, which are often the only, as they are always the most essential, representatives of the great carboniferous system. The mountain limestone is so called from its mineral character and frequent development in bold billy masses, many of which are of considerable magnitude. The thickness varies, but often amounts to 2,000 ft., and the rock is usually hard. It forms the depository for numerous crystalline minerals and ores of lead and zinc, with other metals. The mill-

stone grit consists of a series of sandstones, composed of sandy and quartzose pebbles, sometimes fine, but generally very coarse: it is extensively developed in Northern and Central England. The coal measures consist of alternations of sandstones and shales, with beds of coal and ironstone—total thickness, 2,700 ft. and more. One of the most notable features in its composition is the frequent occurrence of seams of coal and bituminous shale, all bespeaking an enormous profusion of vegetable growth, and a long continued epoch in the world's history, when conditions of soil, moisture, and climate conjoined to produce a flora since then unparalleled either in tropical forms or abundance. It is this profusion of vegetable growth, now converted or mineralized into coal, which distinguishes the carboniferous from all other systems. Pines, palms, tree-ferns, gigantic reeds, club-mosses, and other kindred forms, which crowd every bed of shale, enter into many of the sandstones, and constitute thick beds of coal. The various deposits which form the coal measures do not occur in regular horizontal layers, as might be supposed. When first deposited they are in this position, but they have at various times been subjected to immense disturbances, from the eruption of igneous rocks, greenstones, clinkstones, basalts, etc., which are often associated with them in disrupting, overlying, and understratifying masses. Another proof of disturbance of an upheaving force from below is afforded in the concave form of the strata, besides which the strata have been broken and splintered in various directions, and hence the slips, faults, dykes, etc., which the miner encounters in traversing a single stratum.

The author, after referring to the palæontology of the carboniferous formation, passed on to the question of the origin of coal and its formation, giving the two hypotheses that have been received by different geologists with varying degrees of favor. They are known as the drift theory, and the theory of submergence. The first is that the plants of which the coal is composed were drifted down by rivers, and deposited along with layers of mud and sand in estuaries, several rivers discharging themselves into one estuary, some chiefly carrying down sand, while others transported plants, mud, and other heterogeneous debris. The other theory is that the plants which form the coal measures grew upon the same spot that the coal now occupies, and that the vegetable matter must have grown and accumulated in dense masses for many years. Then the land is supposed to have sunk, and become the basin of a lake, into which rivers carried mud and silt. These, overlying the vegetable matter, gradually consolidated into shales and sandstones, while the vegetable matter itself underwent the process of bituminization and mineralization, and was thus converted into coal. This being done, it is supposed that the basin of the lake was again elevated, so as to become once more the scene of luxuriant vegetation, again submerged and overlaid by new deposits of sandstone and shale, once more elevated and covered with plants, and again submerged—and this alternating process is supposed to have taken place as often as there are beds of coal in any particular coal field.

The author then passed on the second part of his subject—*Coal Chemically Considered*. Coal is an organic compound, of a highly complex character, consisting, ultimately, of carbon and hydrogen, together with smaller quantities of nitrogen, oxygen, and sulphur; iron and manganese are sometimes found, and occasionally other metallic oxides.

Ordinary illuminating gas, obtained by the destructive distillation of coal, consists of light carburetted hydrogen, carbonic oxide, and olefiant gas, to which last named, as containing the greater amount of carbon, the illuminating power is mainly due. A variety of other compounds are eliminated in this distillation, as sulphuretted hydrogen, ammonia, sulphide of ammonium, bisulphide of carbon, and tar, which will be mentioned hereafter. These have all been successfully got rid of by the gas-makers, although the bisulphide of carbon resisted their attempts at purification for a long time. The tar that remains from the distillation is one of the most complex substances with which modern chemistry has made us acquainted. The hydro-carbons which are to be obtained from it by distillation at various temperatures are almost innumerable. Among them are anilene and paraffin, substances which have of late created a considerable amount of interest, and the former especially been the cause of large fortunes accruing to gifted individuals, through whose skill and ingenuity the constituents of such an apparently worthless compound as coal tar have been converted into the most beautiful and choice products of the laboratory. The colors known as mauve, magenta, solferino, azaline, etc., are produced by different processes of oxidation of anilene. These colors, in contradistinction to those previously in use, are not bleached by the action of air or other oxydizing agents. Analogous colors are obtained from naphthalene, another and more plentiful constituent of coal tar. Carbolic acid, also a constituent of coal tar, has lately found an application in the deodorization of sewage, and has been found to be entirely successful, since it not only deodorizes, but has an antiseptic action, which prevents the further decay of organic matter in the sewage, while, at the same time, it does not detract from its fertilizing power. Floating on the surface of the tar is a liquid, of a pestiferous odor, due to the sulphide of ammonium and free ammonia. From this all the ammonia of commerce is obtained, in the form of either the sulphate or chloride.

Mr. Patterson then referred to the combustion of coal in furnaces, and the chemical action that there took place, noticing the various means used to ensure the combustion of smoke. It has long been a matter of dispute among chemists whether the amount of heat given out is in direct proportion to the amount of carbon contained in the fuel. For his own part, the author thought that hydrogen in coal was of no use whatever, as it could only combine with the oxygen, and did so combine in the proper proportions for forming water. It passed up the chimney as steam, carrying with it an enormous amount of latent heat, which could only be supplied by the combustion of a large amount of carbon, which would otherwise have been usefully employed.

This brought the author to the third and last division of his paper—*Coal Commercially Considered*. Coal differs considerably in its physical properties, and has obtained various names in the markets. It may be divided into two varieties—coal containing bitumen, and coal without; the first known is bituminous, and the second as anthracite. The following are a few of the principal divisions of bituminous coal: *Caking or pitching coal*, easily recognizable by its velvet or greyish black color. When thrown into the fire it breaks into small pieces, but on the continued action of the heat the pieces reunite into a solid cake. It burns readily, but on account of its caking quality is likely to clog the fire unless frequently stirred. Cherry coal resem-

bles somewhat in external appearance caking coal. When exposed to heat it cracks and flies, but does not cake. It burns with a clear yellow flame, and is very brittle, from which quality great loss is occasioned in mining it. *Cannel coal* has little luster, is very compact and smooth in texture, and breaks with a large conchoidal fracture. It burns readily without melting, and has been used as candles, whence its name. It is extensively used in the manufacture of gas. The anthracite coal is composed almost entirely of carbon, with a little ash and sometimes a small percentage of volatile matter. It is sometimes very hard, has a high luster, and is often iridescent.

The author then proceeded to the consideration of that important modification of coal known as coke, describing different methods of manufacture, but directing attention more especially to that adopted by the London and North-Western Railway Company for making coke at the Camden station for the use of the locomotive engines, giving a lengthened account of the operation, and a description of the ovens used there. The question of relative efficiency of coal and coke is one of great importance, and one to which a great deal of attention has lately been paid. The author here stated that he had experienced great difficulty in treating this part of his subject, as he found that no two parties who had investigated and made experiments as to the comparative evaporative power of coal and coke agreed in their results, and he had, therefore, come to the conclusion that it would be very much more satisfactory both to the gentlemen present and himself if, instead of giving his own opinions, he laid before them the results of one or two of the experiments that have been made. In 1858, Mr. Longbridge, in conjunction with Sir Wm. Armstrong and Dr. Richardson, made a series of experiments at Elswick. They found that the evaporative power of the coal, compared with that of the coke, was, weight for weight, as 100 to 89, the actual numerical quantities being—Water evaporated from 32° by 1 lb. of coal, 12.54 lbs.; ditto by 1 lb. of coke made from same coal, 11.16 lbs. But this was scarcely the correct way of stating the question. To produce that coke the coal was reduced one-third in amount, 100 lbs. of coal producing 66 lbs. of coke, consequently, taking the above figures, it would be found that, while 1 lb. of coal would evaporate 12.54 lbs. of water, the same coal converted into coke would only evaporate $11.16 \times .66 = 7.44$ lbs. of water. Mr. Hawksley, in a series of elaborate experiments, obtained results widely differing from these. As engineer of the Nottingham Gas Company and the Nottingham Waterworks Company, he had an opportunity of trying the evaporative power of coke as contrasted with that of the coal from which it was made. Under the furnace of a pumping engine, raising a known quantity of water a known height, he found upon the average of a year's working, that from 20 cwt. of coal (Midland Counties) 11½ cwt. of coke was obtained. He then ascertained that 6 cwt. of coke would evaporate exactly the same quantity of water as 7 cwt. of coal. It followed, therefore, that it required almost precisely 3 tons of coal reduced to coke to produce the effect of 2 tons of the same coal, and, consequently, there was a loss in converting the coal into coke for the purpose of producing steam; but, considered only in reference to weight, coke had an advantage over coal in the proportion of 7 to 6. At Mellatt's Glass Works 13 cwt. of coke has been found to produce as much effect in heating the kilns as

20 cwt. of coal. A few years ago the London and North-Western Railway Company instituted a series of experiments to determine whether coal could advantageously be used in substitution of or in combination with coke in locomotive engines. (The experiments were made on Hawksbury coal.) A consumption of 25 lbs. of coke was found to equal that of 35 lbs. of coal in working effect, and 8½ lbs. of water were evaporated by 1 lb. of coke against 5½ by 1 lb. of coal.

Mr. Patterson, after commenting upon and assigning reasons for the discrepancies observable in the results different experimenters had arrived at, concluded his paper by a few observations upon the probable future supply and duration of coal fields.—*Lon. Min. Jour.*

RAILWAY WHEELS IN THE EXHIBITION.

One improvement not long since made in railway wheels is that of stamping them into shape while hot. In welding a wheel together from separate pieces, a strain is left in the whole when the last weld is made. For, being put together hot, the welded parts must afterward contract, and they can do so only by straining upon other parts already cold. On the continent much attention has been paid to this defect, and for the last few years, wheels have been made by stamping them while hot and in the "rough," into the finished shape, at a single operation. One mode of doing this is that of M. Arbel, whose process is adopted by a large number of the Continental railway wheel makers. In England, Mr. William Owen, of Rotherham, has adopted M. Arbel's plans, and sends wheels thus produced to the Exhibition. Not only are the parts, of which the wheel is built up in the rough, welded solidly together, but, as the whole is at one temperature at the moment of stamping, the contraction is distributed alike throughout the boss, spokes, and rim. The stamping is effected by a steam-hammer of great power, and such is the solidity thus imparted to the wheel that, on cutting it open in a lathe, no trace of welding can be discovered. The Compagnie Generale de Matériels de Chemins de Fer, of Brussels, exhibit a number of wheels made by Arbel's process, and wheels thus made are to be found under most of the foreign locomotives and railway carriages in the western annexe. The spoke wheels of this make are much of the ordinary form, except that the spokes are generally oval in section. The Belgian makers, however, exhibit some wheels with six broad spokes 5 in. or 6 in. wide in the direction of the plane of wheel.

The Bochum Company, whose works are but a few miles from Herr Krupp's and Messrs. Naylor, Vickers & Co., of Sheffield, exhibit solid cast-steel wheels, cast whole and without separate tires. Of wheels of this kind the Bochum Company show a pair of driving-wheels about 5 ft. in diameter, while Messrs. Naylor, Vickers & Co. send a pair 7 ft. in diameter, fitted to the axle. The latter are of the disk form, or without spokes, the disk being corrugated so as to facilitate the contraction of the casting, without strain, when newly poured. Of the wear of wheels of this make, we have no evidence at hand. We have, however, seen their strength illustrated by trials of the greatest severity, and should suppose them safe against fracture. When the wearing face of the rim becomes so much worn as to be no longer useful, it is, we presume, to be turned down flat, and a separate steel tire to be shrunk on in the or-

dinary manner. The wheels are necessarily costly.

Mr. William Bridges Adams, of No. 4 Holley Mount, Hampstead, N. W., exhibits wheels fitted with a hoop-spring between the rim and the tire. But, instead of bringing forward a mere model, or a pair of new wheels to illustrate a scheme, Mr. Adams sends a pair of 3 ft. 6 in. wheels, fitted with Staffordshire tires of Messrs. Lloyds, Fosters & Co.'s make, which have actually run 106,143 miles, *without being once turned*, under a heavy four wheel passenger-carriage, on the North London Railway. The tires are still in good condition. Common Staffordshire tires, thus set upon a hoop-spring, so as to give elasticity to the wheels, have greatly outworn the very best Lowmoor tires, set in the ordinary manner. On the Eastern Counties line this mode of setting tires has been adopted to some extent, and we are informed that the leading tires of some of the engines have thus been kept up, without turning, for a mileage of 34,000 miles, whereas tires of the same make, and set in the usual manner, have to go into the lathe after running only 14,000 miles under the same class of engines. On the St. Helen's line, in Lancashire, this mode of setting tires has been carried out on all the wheels—leading, driving and trailing—of some of the engines. A moment's reflection must show that the elastic medium which preserves the tire must also favor the rail, and this is a subject which railway managers may as well examine carefully. The value of the same principle has been recognized in America, where, however, it has been somewhat differently applied. Cast-iron driving wheels with wrought-iron tires being generally used there, the rim of the wheel being cast with recesses across its width, so that it resembles a toothed-wheel. Into each of these recesses a block of seasoned oak is driven, the sides of the recess being "dovetailed," so as to hold the wood firmly in place. The wood projects a little beyond the ribs which separate the recesses, and the tire is heated and shrunk on in the usual manner, bearing wholly on the wood, (on the side, not the end of the grain,) and having no bolts or rivets to fasten it to the wheels.—*London Engineer.*

THE GROWTH OF OUR POPULATION.

Our railroad companies everywhere, but particularly in the West, are deeply interested in the question of the further growth of our population—whether this shall advance in numbers as it has done since the foundation of our government, or come to a stand still. Not a few unfriendly journals in Europe have predicted such an interruption in our career of national growth. Some persons have even gone so far as to anticipate the influx into foreign communities of large bodies of American paupers! But they may make themselves perfectly easy on this head. Severe as may be the losses arising from war, a conflict of one or two years is not going to turn aside the destinies of this country, nor can it essentially retard the progress of a nation possessed of such industrious habits, such natural resources, and such created elements of wealth as the United States. With the cessation of hostilities our people will return to the work-bench, the anvil and the plow with greater eagerness than ever, obliterating in a short time every trace of the fearful struggle.

In a short period of seventy years, namely, from 1790 to 1860, our population rose from 3,929,823 to 31,429,891, an increase of over

700 per cent. in round numbers. During the first decade (1790—1800) the percentage of increase was 35; for the next, 36.4; for the next, 33; for the next, 33.5; for the next, 33.5; for the next, 35.8; and for the last, 35.5. The uniformity of this increase is remarkable. The period showing the smallest growth is that between 1810 and 1840, comprising the era of our second war with Great Britain, and the revulsions attendant upon it at the commencement and the close; also the break-down of 1837. Owing to the lack of sufficient capital and facilities for inter-communication, the recovery from each of these disasters was exceedingly tedious. It is different now, however. We had as general a collapse in 1857 as twenty years before; yet within the space of twelve months afterward our national industry was quite as active as if nothing had happened. It is, therefore, unfair to reason from the effects of the war of 1812, as if the country was in the same condition which it occupied at that time.

The principal argument employed against us is the increase of taxation which is to be so oppressive as to drive most of us out of house and home into the British possessions. It is probable that for a time a good many miners may find their way into British Columbia, nine-tenths of whom will return before five years. All the better for both parties, the more rapidly those territories fill up with a good population. But the people of Canada have to pay taxes as well as those of the United States. Admitting that the general government here will require \$150,000,000 per annum for some years, this will average less than \$5 per head of the population. The budget submitted by Hon. Mr. Galt, late Financial Minister of Canada, amounted to \$12,500,000 for little over two millions and a half of inhabitants. As modified by the present Ministry, the taxes will still average \$4.50 per capita. With our richer soils and more diversified industry we are in a better position naturally to pay the same amount of taxation than our Northern neighbors. And it may be added that they have been about as seriously prostrated as ourselves from the effects of the Southern insurrection.

But there will hereafter be other agencies at work which must tell largely in our favor. In the first place, the throwing open of the public lands for settlement *free*, however inexpedient the step may have been at this particular time, will have the effect of drawing to the Western States hundreds of thousands of the laboring classes of Europe. The Germans, in particular, who are industrious, patient and democratic from instinct, will settle on the public lands in vast numbers, adding a corresponding increase to the centers of trade and manufactures. For every hundred settlers in the Northwest openings for ten inhabitants are created in the city of New York alone. The effect is felt at every point on the great avenues between the Atlantic and the frontier settlements. The commencement of operations in building the great Pacific Railroad will add largely to this volume of immigration. A third still more potent agency will be the development of our domestic manufactures, certain to take place in consequence of the increased duties on foreign merchandise. However much this course of policy might, under other circumstances, have been regretted, we can not help ourselves now. A high tariff must be the rule for ten years to come at least—perhaps for a quarter of a century. This will transfer to our shores large numbers of British mechanics, Irish laborers, French artisans—those elements which form

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	65	43	\$	\$	\$	\$	\$	Sept. 30, 1860	Maryland Sterling.	3,000,000	5			
Baltimore and Ohio.....	Md.		380	13,111,800	10,781,833	566,070	3,922,203	2,305,788		Mortgage.....	2,500,000	6	88	1885	
do do										"	700,000	6	84	1880	
do do										"	1,125,500	6	90	1875	
do do										"	1,000,000	6		1867	
do Washington Branch.....	Md.		30	1,650,000						1st Mortgage.....	701,000	7	55	1866	
Bellefontaine and Indiana.....	Ohio & Ind.	122½	68	1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	2d ".....	160,000	7		1870	
do do															
Buffalo and State Line.....	N.Y. & Pa.	122½	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	132½	75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.		96	3,788,400	8,820,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	3,700,000	6	100	1864	
Central Ohio.....	Ohio.		137	In hands of Receiver.	3,673,000	1,126,458	597,633	71,350	Aug. 1, 1859	1st Mortgage.....	450,000	7	62½	1861	
do do										1st ".....	800,000	7	80	1864	
do do										2d ".....	800,000	7	64	1865	
do do										3d ".....	950,000	7		1865	
do do										4th ".....	1,365,000	7		1866	
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d ".....	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.		222	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7			
do do										2d ".....	1,535,000	7			
do do										3d ".....	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d ".....	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		194	2,897,756	7,335,403	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	80	Feb. & Aug. 1	
do do										2d ".....	3,600,000	7	48	Feb. & Aug. 1	
do do										2d ".....	2,000,000	6	26	May 1.	
Chicago and Rock Island.....	Ills.	53½	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	103	1870	
Chicago, Burlington and Quincy.....	"	76½	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	106½	1863	
do do										" 2d " S. F.	813,000	8	106½	1860	
do do										1st Mor. Chi. & Aur.	393,000	7		1867	
do do										2d ".....	303,000	7		1869	
do do										1st "Cent. Mil. Tract	393,000	7		1864	
do do										2d ".....	245,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.		99	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d ".....	950,000	7	100	1860	
Cincinnati Wilmington & Zanesville ..	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d ".....	532,000				
do do										3d ".....	104,000				
do do										Income.....	305,509				
Cleveland and Mahoning	Ohio.		68½	1,107,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d ".....	469,000	7			
do do										3d ".....	341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	21½	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7	91	1873	
do do										3d 2d Ex.....	1,165,000	7	80½	1865	
do do										4th 3d Ex.....	1,154,000	7	64		
Cleveland and Toledo.....	Ohio.	47½	148	3,343,800	3,850,670	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	359,000	7	65	1867	
do do										1st " " 2d Div.	263,000	7	65	1872	
do do										2d " " 2d Div.	265,000	7		1862	
do do										1st " Tol. Nor. & Cleve	521,000	7	75	1863	
do do										2d ".....	293,300	7	75	1863	
do do										Junction Income.....	44,500	7		1862	
do do										C. & T. Income.....	300,000	7		1864	
Cleveland, Columbus and Cincinnati.	Ohio.	123	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	125	98½	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	99	1861	
do do										2d ".....	303,000	7		1862	
Columbus and Xenia.....	Ohio.	105½	54½	1,490,000	290,700	50,500	See L. Miami.			Dividend.....	272,700		92	1860 to 1866	
Columbus, Piqua and Indiana.....	"		103	In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"		142	2,176,666	2,512,000	292,267	375,002	212,107		2d ".....	2,212,000	8			
Dayton and Western.....	Ohio.		38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	50		
Detroit and Milwaukee.....	Mich.		186	No report						1st Mortgage.....	2,500,000	7		1875	
do do										2d ".....	1,000,000	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.		111	No report											
Dubuque, Marion and Western.....	Ohio.		51	No report											
Eaton and Hamilton.....	Ind.		36	469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.		132	966,061	1,219,100	249,868	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
Galena and Chicago Union.....	Ills.	72½	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	2d ".....	181,000		103	1862 & 1863	
do do										1st Mortgage.....	1,993,000		100	May 1, 1875	
do do										2d ".....	1,520,000				
Great Western	Ills.		175	1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.		64	400,000	No report										
Greenville and Miami.....	Ohio.		32	300,000	473,000	75,000	63,141	13,573		Land mortgage.....	5,000,000		26		
Hannibal and St. Joseph.....	Mo.		206	1,041,066	10,554,000	220,336	996,907	512,933	Sept. 1, 1860.	Mortgage Conv.....	1,354,000		47		
do do										1st Mortgage.....	927,000		30		
Hartford and New Haven.....	Conn.		62	2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	4,000,000	6	99	1873	
Hudson River.....	N. Y.	45	144	3,758,466	9,107,000	162,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	2,000,000	10	108	1869 & 1870	
do do										2d ".....	1,840,000	7	64	1860	
do do										3d ".....	1,840,000	7	93	1875	
Illinois Central.....	Ills.	63½	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000				
do do										Construction.....	12,883,000	7	92	1868	
do do										".....	4,115,000	6	96	1875	
do do										Debtures.....	42,700				
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	60,000				
do do										2d ".....	578,000	10			
do do										Income.....	38,700				
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000	7	85	1866	
do do										2d ".....	400,000	7	85		
do do										Real Estate Mort.....	200,000	7	62		
Indianapolis Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	1st Mortgage.....	649,284				
do do										2d ".....	314,000				
Iowa Central Air Line.....	Iowa.		13	245,000	755,000		No report								
Iron.....	Ohio.			118,665	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st	289,000	7	75	1861	
do										2d	392,000	7	70	1873	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st	250,000	7			
do										2d " Conv.	1,000,000	7			
do										3d "	600,000	7			
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	90,000		89		
do										2d " E. D.	1,000,000				
do										1st Land Grant W D	4,000,000		21		
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.	29		514,433	130,000		108,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883	
Little Miami.....	Ohio.	65					1,330,030	529,981	Jan. 1, 1862	City Loan.....	174,000	6			
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		245,910	98,679	June 30, 1861	1st Mortgage.....	245,000				
do										1st Mortgage.....	2,400,000	7			
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.	238		2,800,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.	203		8,561,213	190,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868	
do										2d "	2,000,000	7			
do										3d "	1,500,000	7			
do										Sterling Income.....	333,000	4			
Michigan Central.....	Mich.	59	284	6,057,784	7,968,429	125,000	2,126,699	910,169	May 31, 1861	Domestic	928,617	6	98½	1872	
do										1st Mort.	467,483	6	84	1869	
do										1st " Conv.	500,000	8	96	1860	
do										1st " unconv.	250,000	8	104½	1869	
do										1st " Dollar Conv.	2,598,000	8	106½	1882	
do										1st " S. F. Conv.	4,153,000	8	106½	1880	
Michigan South'n & North'n Indiana	Mich.&	24½	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. So.	991,000		103	1860	
do										" Nor. Ind.	985,000		103	1861	
do										" Goshen Line.	1,168,000		100½	1868	
do										S. F. Toledo	2,850,000			1885	
do										2d Mortgage	2,465,000		4½	1877	
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8			
do										2d "	200,000	7			
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8			
do										2d "	600,000	8			
Milwaukee and Prairie du Chien.....	Wis.	27½	192	4,944,000	2,556,000		882,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	99	1891	
do	Wis.	71		No report											
Mississippi and Missouri.....	Iowa,	55		No report						1st Mortgage Conv.	1,000,000	7			
do										2d " S. F.	400,000	8			
do										Oskaloosa Div.	1,425,000	7			
do										Land Grant.....	7,000,000	7			
New Jersey.....	N. J.	13	34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000		102½		
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.						
New York and Erie Pref.....	N. Y.	62		Sold under mortgage			5,590,916	1,979,402	Sept. 30, 1860	1st Mortgage.....	3,000,000		105		
do		75								2d "	4,000,000		104		
do										3d "	6,000,000		99		
do										4th "	4,900,000		86		
do										5th "	1,792,500		88½		
New York and Harlem Pref	Conn.	44	138	5,717,190	6,055,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	102½	1873	
do		15								2d "	1,000,000	7	101	1864	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	7	94	Dec. 1, 1866	
do											978,000	6	101	Oct. 1, 1875	
New York Central.....	N. Y.	90	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,925,000	6	106½	May 1, 1883	
do										Mortgage.....	3,000,000	7	106½	June 15, 1884	
Northern Central.....	Md.	138		2,260,000	5,890,300	537,936	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,096,500	6			
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,500,000	6			
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500				
do										3d "	316,995				
do										Construction.....	4,637,920				
Ohio and Mississippi, Western Div....	Ills.	148			3,292,403		No report			Income.....	3,591,185				
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000				
do										" S. W.	2,800,000	6			
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	Construction.....	4,500,000	6	104½	1888	
do										1st Mortgage Conv.	4,900,000	6	98½	1875	
do										2d "	2,319,000	6		1875	
do										" Sterling.	1,957,440	6			
Peru and Indianapolis.....	Ind.	74		1,100,090	820,000	80,000	No report			State Works.....	7,200,000	5	89		
Philadelphia, Wil. and Baltimore.....	Del.	98		5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6	99½	1884	
do										Improvement.....	119,000	6		1863	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,757,273	2,335,363	761,555	June 30, 1861	1st Mort. O. & P.	1,000,000	7	78	1865	
do										2d "	750,000	7		1866	
do										1st " O. & I.	1,000,000	7		1872	
do										2d "	380,000	7		1873	
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,202,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n	500,000				
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,328	220,850	68,432	May 10, 1861.						
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856	
do										"	997,000	7		1866	
do										"	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886	
do		56		40,070	500,000		110,200	53,100							
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000				
do										2d "	450,000				
Steuensville and Indiana..	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d "	900,000	7		1865	
Terre Haute, Alton and St. Louis....	Ills.	208		No report						1st Mortgage Conv.	1,000,000	7		1862	
do										2d " Conv.	2,000,000	7	80	1868 & 1870	
do										1st " Bel. & Ill.	517,000	7		1873	
Terre Haute and Richmond.....	Ind.	100	73	1,381,450	230,000	none.	377,092	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	91	1866	
Toledo, Wabash and Western.....	Ohio & Ind	51	243	2,123,500	5,996,049	52,389	233,545			1st Mortgage.....	3,400,000	7	59	Aug. 1, 1865	
do										2d "	2,500,000	7		Nov. 1, 1878	
do										Mort. Coupons....	98,000	7		1890 to 1895	

the bone and sinew of a community.

To what extent there is likely to be of migration of Northern people South and of Southern people North, it is hardly safe to speculate upon. But if, as we incline to think, the two populations are to mingle together to a greater extent than before, the general effects can not fail to be beneficial to both parties, as also to the advancement in numbers of our aggregate population. With a properly organized industry, the States lying beyond the Potomac and the Ohio could absorb five millions of immigrants in ten years, and be all the better for the increase. Meanwhile it must be borne in mind that the most closely populated State in the North is by no means filled to its utmost capacity.—*R. R. Jour.*

ROAD-MAKING—A French inventor has recently built, or at least designed, a steam roller to consolidate gravel and macadamized roads. A pair of cylinders, inclined at forty-five degrees, act on an outside crank on one end of the axle of the main roller or drum. The front axle has wheels as broad as can be, and is controlled by steering gear similar to that used on steam carriages and traction engines. It is claimed that this machine will be better than horse-drawn rollers, because it can run both backwards and forward with equal facility, be easily reversed, and work on a short piece of road until it is sufficiently consolidated; and it does not impair its own work by digging it up, as horses feet do. Without saying that this particular engine is the best that can be devised for this work, we confidently say that these claims are far within the limits of what is already demonstrated by engines built for other uses. We have ridden upon an engine that had a drum in place of a pair of driving-wheels, and have carefully observed its effects on a gravel road, and were convinced that such engines would make gravel roads as hard as the foot-path alongside of them, even much harder, because of their immense weight. But while horses beat up the roads, such material as gravel will be loose, unless rolled by great numbers of heavy rollers or broad wheels. Macadam, before a parliamentary committee, said that in dry weather the fast horses would make the roads too loose for quick traveling, were it not for the effect of the wheels in rolling down what the feet knocked up.

As the collection and distribution of all traffic must be by the common roads, it is important to railways and all other main conveyances that common roads should be aided by the science that has thus far tended to deprive them of the attention necessary to keep them in economical condition. If more talent and money had been spent upon them, less horse flesh, carriage wear, and less time would have been lost upon them, and the result would have been a great saving of public wealth. Good rollers, especially if moved by a power that will not allow horses to disturb the surface until it is well hardened and leveled, may do much to mitigate the barbarism of common roads.

NEW IRON CAR—DR. LA MOTHE who has for several years labored, with some success, to introduce cars made of thin iron plates, has devised a new plan which he considers much better, in which the frame is made of tubes. A horse-car on this plan has just been completed at Steel's shop in Jersey City. It is much lighter than wooden cars, is said to be very strong, and likely to be durable. It is to run on the Hoboken horse-railway.

KRUPP'S CAST-STEEL TIRES.

COMMUNICATED TO THE AMERICAN RAILWAY REVIEW.

LONDON, May 10th 1862.

Two of these tires have been loaned to Mr. Krupp by the North London Railway Company, and are placed in the Exhibition, with his magnificent show of cast-steel cannon, axles, tires, crank, intermediate and other shafts, together of the value of \$90,000, and occupying a space of 17.5 by 40 feet.

The tires above referred to have run sixty-seven thousand miles, and do not yet require turning. The road is very severe upon tires, and the engines are of the heaviest class, and continually under the brake, the stoppages averaging about every mile.

Extract from a report made to the Board of Directors, by their engineer dated April 14th 1862: the engines of this line run one million miles per annum, in round numbers, and this mileage performed by Krupp's Tires would cost £733 6s 8d. while by Low Moor Tires the cost would be £2,087 10s.

The average thickness of the tires is 2 21 inches, and Krupp's are calculated to be worn down to one inch before they are discarded.

A comparative statement on coupled driving wheels under the same engine:

	Low Moor.	Belgian Steel.
Probable life of a tire in miles run.	189,539	30,531
Greatest distance run without turning in miles.....	70,922	18,696
Average distance run without turning in miles.....	46,396	15,314
ON UNCOUPLED OR CARRYING WHEELS.		
Greatest distance run without turning in miles.....	95,965	....
Average distance run without turning in miles.....	79,947	....

To run 189,539 miles will require one set of Krupp's tires, four times turned, at a cost of £139, or six sets of Low Moor, twelve times turned, at a cost of £396, without making any allowance for the value of the old metal—which is greatly in favor of Krupp's. The cost, therefore, of running one thousand miles is 14s. 8d. by Krupp's and 24. 1s. 9d. by Lowmoor tires, showing a saving of 65 per cent.

It is a remarkable fact that the Belgian steel is even inferior to iron, showing clearly that the quality of Krupp's steel, and not the mere fact of his tires being steel at all, is the important consideration. T. A. R.

CHICAGO, BURLINGTON & QUINCY R. R.—The last number of the *Hannibal Messenger* pronounces a glowing eulogy upon Mr. Mead, Assistant Superintendent of the Chicago, Burlington & Quincy Railroad, as follows:

Among the chief managers of this popular thoroughfare, the Assistant Superintendent, Charles W. Mead, has attained a very enviable reputation as an efficient, faithful and energetic officer. He thoroughly understands his business—is popular with all connected with the road—always gives satisfaction to those with whom he transacts any official business—is prompt, obliging and gentlemanly in all his dealings—and has no superior in the West, either in his official capacity or in the walks of private life. He is a whole-souled gentleman, and his patriotism is as large and noble as his heart. We say this in no spirit of flattery, but as an honest and candid expression of our belief. All those who are acquainted with Mr. Mead will bear witness to the truth of our statements. We trust that his future may be as bright and prosperous as his past history has been honorable and popular.

MONETARY AND COMMERCIAL.

The past week has been one of great excitement; for a few days business was scarcely thought of, and the only questions asked were, "what's the news from Richmond?" This having become settled, the usual quiet in general business is again restored. Speculations in gold, with an unwarrantable increase in rates has been the most noticeable feature of the week. Numerous are the plans suggested for stopping the flow of gold from the country, which however up to the present time has not been as large as might have been anticipated from the unfortunate condition of our country. The Commercial, remarking on this subject says, "some, in their apprehensions of a continuation of the course of the markets for coin, and in their desire to have it checked, are discussing the probability of the prohibition of its shipment or the imposition of an export duty, by the Government. This would be an unfortunate expedient, and should not be adopted excepting as unavoidable. It were better to make our tariff rates prohibitory. If we would quit our extravagancies, and abandon unnecessary importations, there would be no necessity for the exportation of coin to pay our living expenses, and as to what we owe abroad in the way of bonded debt, the interest could be paid without inconvenience."

Over importation and extravagance have always been the greatest evil from which our country has suffered. It holds equally true with nations as with individuals that whoever expends more than their income, never becomes rich; and it has ever been a leading trait in our national character to buy on the strength of what we expect to make, and not on what we have accumulated. This propensity has led to over importation; and, necessarily to sacrifices to pay our debts. If we could all content ourselves to dress in home manufactured goods, and to consume no luxuries but those that are the product of our own country, we could then of course keep our gold at home, and it would be unjust in the extreme to pass any laws that would prevent people from paying their debts.

There has been moderate offerings of paper, for the season of the year, which has been done at the usual rates, viz., 8@12 per cent. for that having short time to run. The exchange market is easy at quotations:

	BUYING.	SELLING.
New York,.....	1/2 @ 1/2 dis.	par.
Boston,.....	1/2 @ 1/2 dis.	par.
Philadelphia,.....	1/2 @ 1/2 dis.	par.
Baltimore,.....	1/2 @ 1/2 dis.	par.
Gold,.....	10 1/2 prem.	11 1/2 prem.
Silver,.....	6 prem.	7 prem.
Demand Notes,.....	4 1/2 prem.	.....

Major Kilburn made the following contracts for Army supplies:

525 bbls. flour, L. Fagin.....	\$4 00
525 " J. W. Meal.....	4 00
250 bush. beans, L. & M. Stone.....	3 00
30,000 lbs. rice, Brown, Stout & Butler.....	6c
45,000 lbs. sugar, ".....	8 90
24,000 lbs. roasted coffee, James A. Frazer & Co.....	25 1/2
2,750 lbs. star candles, Proctor & Gamble.....	15 1/2
12,000 lbs. soap, ".....	5 1/2
50,000 lbs. bacon shoulders, Brooks, Johnson & Co.....	3 48
25,000 lbs. " McKeehan & Evans.....	3 49
50,000 lbs. " Brooks, Johnson & Co.....	3 52
75,000 lbs. " J. Rawson.....	3 55
25,000 lbs. " Wm. Cliford Neff.....	3 55

The following sale of Railroad Stock was

made by Graff & Kohl, at the Merchants' Exchange on Thursday, July 10:

25 shares L. M. R.R. Co. Stock.....	@107 00
87 shares	@106 63
59 shares Col. & Xenia Co. Stock.....	@103 50
59 shares	@103 45
20 shares Cin., Ham. & Dayton Co. Stock.....	@ 99 00

To-day's bank statement, says the *Herald* of July 7th, compares as follows with that of last of last Monday:

Week ending	Loans.	Specie.	Circul'n.	Deposits.
June 11.....	\$148,340,401	30,732,636	8,910,344	127,800,703
July 5.....	148,643,718	31,790,519	9,270,815	127,476,334
Increase.....	\$306,317	957,893	360,471	.....
Decrease.....	.....	.....	.....	\$376,174

The increase in the specie column would doubtless have been more considerable but for the withdrawal of special deposits for shipments abroad, and likewise for the sales of coin by some of the banks, who fixed ten per cent. premium as a good figure at which to realize some of their surplus specie. The banks now refuse to pay out specie to any one except at the current market price of the article, and many will not sell at all. The circulation of the banks is increasing; currency is so much wanted that the banks can not make notes fast enough for their wants.

Money is moderately active at 5@6 per cent, most of the loans of which we hear to-day being at the latter rate. An easy and comfortable money market is confidently expected to exist throughout the summer.

The stock market was irregular to-day. Government's, State stocks and New York railway shares were lower at the first Board; the Western shares were generally higher. Government sixes fell $\frac{1}{2}$, Tennessee $\frac{3}{4}$, Missouri $\frac{1}{2}$, New York Central $\frac{1}{2}$, Pacific Mail $\frac{3}{4}$, Erie $\frac{3}{4}$, Erie Preferred $\frac{3}{4}$, Hudson $\frac{1}{2}$. On the other hand, Michigan Central advanced $\frac{1}{2}$, Southern old $\frac{3}{4}$, guaranteed 1, Illinois Central $\frac{3}{4}$, Galena $\frac{1}{2}$, Toledo $\frac{1}{2}$, Rock Island $\frac{1}{2}$. Bonds were in good demand; the issues of North-western were all higher. As a general rule there is a better tone in the market, and more disposition among outsiders to buy stocks than there was a week ago. Between the Boards the market was dull, but steady. At the second Board stocks were generally lower without much business. The market closed weak, the following being the closing quotations: United States 6's, registered, 1881, 101 $\frac{1}{4}$ @101 $\frac{1}{2}$; United States 6's, coupon, 1881, 101 $\frac{3}{4}$ @101 $\frac{1}{2}$; United States 5's, coupon, 1874, 90 $\frac{1}{2}$ @91; Treasury notes, 7 3-10 per cent, 103 $\frac{1}{2}$ @103 $\frac{3}{4}$; Tennessee 6's 52 $\frac{3}{4}$ @53; Virginia 6's 54@55; North Carolina 6's 70 $\frac{1}{4}$ @72; Mississippi 4 $\frac{1}{2}$ @47 $\frac{1}{2}$; American Gold 110 $\frac{3}{4}$ @110 $\frac{1}{2}$.

An official statement from the Treasury Department shows the Federal debt, on the 29th of May, to be \$191,418,984. In this statement it appears by the Department books that \$146,000,000 of Demand Notes are already out. A fair deduction might with propriety have been made for "notes on hand," in the vaults of Sub-Treasurers, &c.—say 20 millions.

The next most gratifying item in this statement is that: 2,700,000 of the 5-20-year sixes had been taken by the people.

The question is discussed whether another issue of Demand Notes will be required. We

answer in the negative; unless it shall be some 20 to 25 millions of 1s, 2s and 3s, for army accommodation.

With the privilege to fund the currency into a Federal six per cent. stock, the people will never carry 100 millions of government currency. But, says the new convert to a Treasury note currency, *by your own showing above the Government has now 126 millions in circulation*. Bear in mind that 60 millions of it is the old issue, receivable for duties, and by the premium it bears has ceased being currency, and has become an investment in the hands of the holders.

Take this premium issue out of the hands of the holders, and it makes an opening for an equal amount of securities, but not of currency. From the day the law was passed making only the old issue receivable for duties people began to assort and lay by that class of currency, under the very correct idea that it would be premium money. Of course it ceased to be currency.

It might be well for Mr. Secretary Chase to take off the market some 10 millions of these Custom House Demand Notes. By so doing he would be in receipt of a portion of the duties in gold, in time for the October and January interest on the public debt.

It is only a matter of judgment whether to exchange 7 30s or 6s of 1881 for Custom House Notes now, and save some 2 $\frac{1}{2}$ per ct. premium, or to buy gold in the fall, at whatever premium the speculators may ask.

With the holders of Custom House Notes it is only a matter of time when their investment in that line shall bear a premium equal to gold. A negotiation of only 15 or 20 millions would put them on a gold valuation instantly. In the natural course of absorption they will, in the course of thirty days, range but $\frac{1}{2}$ @1 per cent. below gold, and there they will hang for several months. In any event, those who lay aside paper money for future use would do well to put it in the currency that is "receivable for all public dues." It will at least earn some interest by appreciating in value, as compared with the legal tender currency; and if gold rises to a high premium, the old Demand Notes will rise to the same standard.

Should the necessities of the Treasury force Congress to authorize 50 or 100 millions more of Demand Notes, there will be a perfect panic in currency, and gold and Custom House Notes will rise to more than 10 per cent. premium. It is on this aspect of the question that we advise Mr. Secretary Chase to make an effort to cancel the Custom House Notes, and thereby open the way for an equal amount of the legal tender issue in their stead; and by all means avoid an appeal to Congress for another issue of currency notes, except it be for a moderate issue of 1s, 2s and 3s.

Sixty days before Mr. Buchanan gave place to Mr. Lincoln, it became necessary to borrow on Treasury Notes bearing one per ct. per month interest, in order to save the Govern-

ment from bankruptcy. The entire Federal debt at that time was less than eighty millions; but Cobb, (Buchanan's Secretary of the Treasury,) Floyd (Secretary of War,) and Thompson (Secretary of the Interior,) had purposely prostrated the power and credit of the Government, and it required more nerve to buy a 12 per cent. Treasury Note then, at par, than to buy a 7 3-10 now, at 5 per ct. premium. For then the country had no Government, but now we have a Government.

The war, up to the present time, has cost, in round numbers, 400,000,000. Thus:

7 3-10 Treasury Note Bonds,	\$125,000,000
6 per cents. of 1881,	50,000,000
Demand Notes (no interest,)	130,000,000
12-month Certificates, (6 per ct.,)	45,000,000
Deposits with Treas. (5 per ct.,)	50,000,000

Total war debt, \$400,000,000

The floating debt now outstanding is a fair offset to the 12-month and 2-year Treasury Note debt, issued before the war, and paid from the four hundred millions above.

Adding the old Federal debt to this war debt, we have a national debt of less than five hundred millions; and taking the average rate of interest the Government is paying on this debt, we find it to be 4 $\frac{1}{2}$ per ct. per annum. The interest paid on the debt made since the war broke out averages only 4 per cent., the old debt bearing a higher average rate of interest than the war debt.

That the Federal exchequer has been managed with great ability, is apparent from these results. That the united and determined action of the people of the North, in saving the Union, is the foundation for these results, is an equal truth. This country has more vitality than any nation on earth, and with such a tax bill as Congress has by a resolution pledged itself to pass, Federal stocks are the best paper security made.

The following circular has been issued in regard to mutilated United States Notes:

TREASURY DEPARTMENT,
Washington, May 18, 1862.

To guard against frauds upon the Government, and to secure the just rights of holders, the following rules for the redemption of United States Notes are hereby established:

RULES.

First.—Mutilated notes, which have been torn, no matter how much, but of which it is evident that all the fragments are returned, or defaced, no matter how badly, but certainly satisfactorily genuine, will be redeemed at their full face value on presentation.

Second.—Fragments of notes will be redeemed in full only when accompanied by an affidavit, stating the cause and manner of the mutilation, and that the *missing part of the note is totally destroyed*. The good character of the affiant must also be fully vouched by the officer before whom the affidavit is taken.

Third.—In the absence of such affidavit, fragments of notes will not be paid in full, but the parts presented will be redeemed in their proportion to the whole note, reckoning as a general rule by twentieths.

Fourth.—Less than half of a note will not be redeemed except by payment of the full

value of the note under the second rule; or by the payment of the proportional value of the missing part, when presented under the fifth rule.

Fifth.—Fragments of notes, for which less than the full face value has been paid, will be retained for a year, to the end that the owners, who have received less than the value of a full note, may have opportunity to return the missing part and receive the amount previously withheld.

Sixth.—Until further order, mutilated notes and fragments will be redeemed only at the Treasury of the United States, at Washington, whither they can be sent, addressed to the "Treasurer of the United States," by mail, free of postage. A draft on the Assistant Treasurer, at New York, for the amount allowed, will be returned, in the same way, to the address of the person remitting the same.

S. P. CHASE, Sec. of the Treasury.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:30 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	7:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day, Toledo & Dayton.....	5:20 P. M.	10:10 A. M.
Cin. & Chicago Air-Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Terre Haute and Lafayette and Chicago Mail.....	5:05 A. M.	11:10 A. M.
Indianapolis and Chicago Night Express.....	3:20 P. M.	11:50 P. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

ns run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Evansville and St. Louis Mail.....	5:00 A. M.	10:45 P. M.
Evansville Accommodation.....	3:00 P. M.	8:45 A. M.
Evansville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.
One through train for Louisville and St. Louis Sunday evenings.		

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

P. W. STRADER,
General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads

W. H. L. NOBLE,
General Ticket Agent Indianapolis & Cincinnati Railroad.

E. F. FULLER,
General Ticket Agent Ohio & Mississippi R. R.

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.

Tube CLEANERS, Steel Wire and Whalebone BRUSHES.

Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enameled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warming Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Piazza Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.

Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,

28 Platt Street, New York

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INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums 419 by Franklin Institute.)

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE-INDIANA POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily for the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 3:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:26

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M. Chicago at 6:00 A. M., connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,

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CINCINNATI

ERIE RAILWAY.

Great Broad Gauge, Double Track and Telegraph Route

TO

NEW YORK, BOSTON, AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

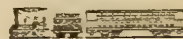
For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DONLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6.

CHARLES MINOT, Gen'l Sup't.

Baltimore and Ohio Railroad

RE-OPENED!



This great national thoroughfare is again open for

Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition,

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$5.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Baltimore, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

1861.

1861

FAST TIME.

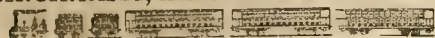
LITTLE MIAMI

AND

COLUMBUS AND XENIA

AND

CINCINNATI, HAMILTON & DAYTON



RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express.—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation.—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation.—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Richmond, Indianapolis and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation.—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express.—From Cincinnati, Hamilton and Dayton Depot.—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,

General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet Walnut & Vine
CINCINNATI O

MORRILL & BOWERS,
(Successors to and members of the late firm of
O. WASON & CO.)
CLEVELAND, OHIO,
Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the highest quality in style, workmanship and material. Orders are respectfully solicited, with the assurance that pains will be spared to give entire satisfaction in every respect.

1862.

1862.

Pennsylvania Central R.R.

285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA

(with close connections from Western Cities.)

ALL CONNECTING DIRECT TO NEW YORK,

THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (430 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.

BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freight of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, and to from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

It is particularly to mark packages "PAID BY SHIPPER TO CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburgh.

CLARKE & CO., Transfer Agents, Pittsburgh.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

W. W. AIKMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.

CLARKE & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

G. B. NEAL, Parkersburg, Virginia.

HALL & CO., Marietta, Ohio.

H. S. PIERCE & CO., Zanesville, Ohio.

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Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

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L. L. HOEFT, Gen'l Ticket Agent, Philadelphia.
H. M. HOUSTON, Gen'l Freight Agent, Philadelphia.

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Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

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TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the

Most Reasonable Terms.

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RAILROAD AND CAR

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MACHINERY,

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Cincinnati and Chicago Air-Line



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through Distance 280 Miles;

42 Miles Shorter than any other Route

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M., 3:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth Street Depot.

Freight trains leave at 6:00 P. M. and run directly through to Chicago without rebilling or transhipment.

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C. E. FOLLETT,

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S. W. CHAPMAN, Gen. Freight Agent,

33 Randolph Street, under Sherman House, Chicago, Ills.

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STOCK BROKER,

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FOR 1861

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THE NAMES AND RESIDENCES

OF THE

PRESIDENTS, DIRECTORS

AND

OFFICERS

OF ALL THE RAILROADS IN THE

UNITED STATES

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M. W. BALDWIN & CO.
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BROAD AND HAMILTON ST.

Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order—Wheels Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned
THEODORE DEHON,
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EDWIN J. HORNER,

SUCCESSOR TO

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Indianapolis, Ind.,

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Dayton, O.,

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We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALL ON BOTH SIDES, impossible to unravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

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Feb 12.

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INSTRUMENT MAKERS,

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Drawing Instruments, Scales of all Kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand, repairing attended to.

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Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co. Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
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FREEDOM IRON COMPANY.

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Engine and Car Axles, Pump and Piston Rods

Bar of all Sizes,

And all Forgings for Railroad Machinery.

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JOHN A. WRIGHT, Sup't

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LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

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COAL OR WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay

JOHN ELLIS, President.

WALTER McQUEEN, Sup't.

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ESTABLISHED 1821.

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Wrought Iron Welded Tubes—from ½ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

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Cast Iron Gas or Water Pipe—from ½ to 24 inches diameter, and branches for same, &c.,

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, JULY 17, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

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If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	10.10 A. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.10 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	6.00 A. M.	5.40 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.10 A. M.
Marietta & Cincinnati—		
Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.
Ohio & Mississippi—		
Mail.....	5.05 A. M.	10.05 P. M.
Savannah Accommodation.....	3.00 P. M.	8.45 A. M.
Express.....	5.00 P. M.	6.53 A. M.
Indianapolis & Cincinnati—		
Mail.....	5.05 A. M.	11.10 A. M.
Chicago Express.....	3.20 P. M.	11.50 P. M.
Dayton & Michigan—		
Toledo, Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.
Kentucky Central— (City time.)		
First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

STEAM ON CITY RAILWAYS.

The introduction of steam on city railways has long been a desideratum, and one that has received the indorsement of engineers, writers, and practical men in all our principal cities. Especially is steam desirable for the movement of cars on those portions of our long railways terminating in the centre of large cities, such as Baltimore, Philadelphia, and New York. The Hudson River road traverses the city of New York for more than six miles—from Spuyton Devil Creek to Chambers street. The Harlem passes down the Fourth Avenue to White street—three or four miles. The Pennsylvania Central passes for more than a mile through market street, the principal business street in Philadelphia, while the roads entering Baltimore from the east pass through business streets for a mile or two, and on all these roads the use of steam is prohibited inside of certain limits. The consequence of this prohibition is, that all the passengers and freight entering or leaving those cities by the roads mentioned have to be dragged through the streets by horse or mule power, to the almost total exclusion of other vehicles, and the comfortable transaction of the ordinary business of the streets. Were the use of steam permitted on these lines, whole trains of cars could be sent out at once, and the obstruction of the street at any one point would be only for a minute or two while the trains were passing. A person has but to spend a half hour in Market street, Philadelphia, and watch the operations of the muleteers with their long strings of mules, of a dozen each, constantly passing and repassing with a single car, to be fully satisfied that the use of properly constructed locomotives to perform the same service, would not obstruct the street one-tenth as much as the present mule teams and their noisy drivers. The same is the case with the Hudson river road and the Harlem and also the roads entering Baltimore.

The only objection that can possibly be urged against the use of steam in cities is that it frightens horses, and might prove dangerous to the lives and limbs of foot passengers. The first of these has some flausibility in it; but we have only to turn to railway stations in all parts of the country, to learn the fact that horses become as readily reconciled to the locomotive, as they do to any other strange or novel machine. We remember very well, when steam fire engines were first introduced into this city, that a strong opposition was raised against them because they would frighten horses. But who is there now that would object to them on that account? Surely no one, for our steamers are hauled through the streets with furious speed, belching forth smoke and fire at a fearful rate, on every alarm of the great bell, and yet but few, if any, serious disaster has ever been caused

thereby. As to the danger to foot passengers from the use of steam, the fears are all idle. Every body knows that steam is one of the most obedient servants man has, and that its use on the public highway would be far safer than that of horses, so far as foot passengers are concerned. We hope, therefore, that all sensible men will use their influence in combatting popular prejudice on this subject; and that the day will speedily come when that noble and faithful friend of man, the horse, will be forever released from the drudgery of the dray, the omnibus and the car, and his place supplied by the locomotive and the steam car.

In New York and Philadelphia, as well as Cincinnati, several dummy engines consuming their own smoke, and making no noise, have been constructed; and some of them have given promise of satisfactory results, so soon as public opinion can be so far enlightened, as to admit of their practical introduction. Among the most successful of those machines are some that have recently been constructed by Messrs. Danforth, Cooke & Co., of Paterson, N. Y., for the Hudson River Railway.

The following description of these machines we condense from the *Scientific American*:

The dummy is a condensing locomotive of peculiar construction, and its object is to supercede horses in the streets of the city. Outwardly it resembles a big box on wheels, like a freight car with a chimney. This long box is made of boiler iron; it has double hollow sides which contain water, and form the tank of the engine. The boiler, engine, condenser and pumps are placed within this box and supported on a suitable framing. The boiler is vertical and tubular, and spreads out toward the top. The engines consisting of two horizontal cylinders with their appurtenances, are placed in front of the boiler, and very nearly in the middle of the car, inside of the wheels. The cylinders are each eleven by fifteen inches, and their piston rods work a transverse double crank shaft situated close to the lower part of the boiler. On the outer ends of this shaft are grooved friction pinions, each twelve inches in diameter; these gear into large grooved friction wheels, each thirty inches in diameter, and from the shaft of the latter, motion is given by connecting rods to the two front and two back driving wheels at each side. This frictional gearing, as a substitute for cog gearing for reducing the speed of the driving wheels, is an excellent arrangement. One of these dummy engines will haul twenty-four cars. The speed, of course, is slow, but this is a necessary requirement for large cities. The object of using a condensing locomotive for such a purpose is to obviate the noise peculiar to the exhaust in the smoke stack. The cylinders of the dummy exhaust in front into a small tubular condenser, the condensing water of which is supplied from the tank. The water to feed the boiler passes from the condenser by a tube into a cylindrical iron well situated under the two feed pumps, which are placed close together between the two cylinders, and are worked from the link motion. The feed is thus always proportioned to the amount of steam consumed, which is carried at from 110 to 140 lbs. on the inch, and is cut off short. The construction of such an engine is far more difficult than a common locomotive, because it embraces more parts, and these are required to be arranged in a very small compass. Coke is used as the

fuel so as to obviate smoke, and a blower is employed to furnish the draft.

These "dummies" are intended for large freight and passenger trains, and are consequently much heavier and more expensive than those required for single street cars. Besides, we fancy that the builders of them have followed in the old beaten track of the "locomotive," instead of producing, as a genius like Ericsson would, a new simpler machine that would have answered the purpose as well as, if not much better than, the ponderous engines that now drag our express trains thirty or forty miles per hour. There is a wide field open for inventors in this direction, for no doubt we shall soon have steam in our street railways; but a class of light engines for accommodation and short passenger trains on all railways leading into our larger cities. The use of 25 ton engines to draw a couple of cars with 50 or 60 passengers is sheer nonsense, and an expense that few roads can afford.

PHILADELPHIA, WILMINGTON & BALTIMORE RAILROAD.

The twenty-fourth Annual Report of this Company, embracing its operations for the year 1861, is received. Although coming rather late in the year we think it will be found interesting to our readers. The President says:

The year which this report embraces has been the most extraordinary one in the history of the road. It began with a prosperous and regular business, which bid fair to go on increasing; but early in the year, the political horizon became overcast with clouds, and in April the great Rebellion, which began in an attack upon Fort Sumter, culminated in an assault upon a Massachusetts regiment in the streets of Baltimore, which had been carried over the road for the defense of the Capital. This was succeeded on the night following by the destruction of three bridges, between the Susquehanna river and the city of Baltimore, by fire. The incendiary's torch was applied by I. R. Trimble, the former Superintendent of the road, professing to act under orders from the city of Baltimore and the State of Maryland. This uncalled for and criminal act was perpetrated on the morning of April 20th, and the road on the other side of the river Susquehanna, for forty miles, was disabled. The resources of the road and its ability to serve the Government were not, however, cut off, as was intended. Troops were immediately forwarded to Washington, via Perryville, and thence by steamer, "The Maryland," to Annapolis, and thus through the instrumentality of this Company the Annapolis road, the then only available route to the Capital, was immediately occupied, and troops were transported to Washington in season to save the city. The road has thus earned, if it has not received, the grateful remembrances of the Government. Though a corporation, it did not forget its duties to the country, in the darkest hour of its

history, and in its most trying emergency. It expended its money, its resources, and the energies of all its employees, at a time when the fate of the country seemed trembling in the balance, and when many hesitated into which scale to throw their weight.

Amid all this, the managers of the road never doubted their duty, nor hesitated to perform it at any cost.

For a few months the business of the road was not satisfactory. The bridges beyond the Susquehanna, for want of aid from the military, remained unrepaired for some time. Finally, on the 14th day of May, the Company succeeded without aid from the Government, in completing the repairs, and in opening the road through to Baltimore, for both freight and passengers. For some time, notwithstanding the invaluable services this Company had rendered the country in its hour of greatest need, another and a much longer route was availed of by the Government, for the transportation of troops and supplies, and this route was unaccountably ignored; but its importance has since been recognized, and its business largely increased—taxing at times its utmost capacity, with the rolling stock it then had.

Since the Government increased its requirements for the transportation of troops and supplies, we have added very largely to our stock of cars and engines, and also to our tracks and turnouts. We have also made large improvements at the Susquehanna river, rendered necessary to accommodate, on each side, the long trains it became necessary to run.

We have expended during the last year for new work on the road, and for new cars and engines, as follows:

For new track, (about two miles,).....	\$13,067 82
New buildings, fences and bridges.....	11,640 25
45 new freight, platform and express cars.....	25,314 72
15 new passenger cars.....	29,316 70
2 new locomotives.....	17,705 13

Total..... \$97,044 62

Besides those above enumerated, there were, placed on the road thirty-five freight cars and two mail cars, not yet paid for. In addition to these, we have now building four new locomotives and thirty new freight cars.

Exclusive of the new track, there were about twenty miles of the main track relaid with new cross-ties and new iron rails, the cost of which is included in the operating expenses.

The ferry boat "Maryland" has performed an amount of work the last year greater than any other boat of the kind in the world. It has never in a single instance failed to perform its part of the duty. All the troops and all the freight have been taken over on deck without change of cars; and for several months the New York and Philadelphia and Washington passengers have been carried through without any change of cars either at the river or at Baltimore.

Arrangements are now in progress for carrying both passengers and freight, between New York and Washington, in the same cars—thus avoiding the frequent changes which have heretofore given rise to so much dissatisfaction on the part of the public. Already the tracks

of the horse rail roads between the Kensington depot and our station at Broad and Prime streets have been so connected that passengers are taken from one station to the other in the same cars, and are transferred from the cars of the horse rail road to our cars and those of the New York lines, without exposure to the weather.

With a connection by locomotive now provided for in Philadelphia, and some projected improvements carried out in Baltimore, no route can be devised between New York and Washington so short in distance or expeditious in time as the present route. Much has been said in the public journals and in the halls of Congress, about an air line between these cities, to be built under the patronage of Government for military purposes; but it is presumed when all the facts are put before Congress and the public, that this scheme will be abandoned as one not required by any emergency justifying the expenditure. Government works cost, in the first place, much more than the same character of works when built by private enterprise; and, when once built, they afford offices for greedy politicians, who pervert the works to their own selfish purposes, and thus entail a constant loss upon the Government, without any return in valuable services.

The present roads between New York and Washington, passing through Philadelphia and Baltimore, are on the most direct practicable line. An air line between the two cities would cross the Chesapeake bay below the mouth of the Susquehanna river, and be therefore totally impracticable. A line avoiding Philadelphia and Baltimore, and relying upon the business between New York and Washington, would find its running expenses exceed its revenue, and would therefore be but a poor speculation in the hands of individuals, while in the hands of the Government it would be productive of nothing but loss, and the service it would perform would be, from the nature of the case inferior and unsatisfactory. In ordinary times, the Government has but little service to be performed by railroad, other than the carrying of the mails. It is to be hoped that the present emergency, demanding such extraordinary service, will soon pass away—by the effectual suppression of the rebellion; but if it should continue, and the Government require an amount of service equal to the present, or need greater facilities than the roads with their present means can now furnish, an expenditure of fifteen or twenty per cent. of the cost of a new road by the Government, in improving the present roads, would enable them to meet promptly all the wants of the country, and from their increased earnings reimburse the Government for both the outlay and the interest on the same.

A double track railway between New York and Washington, with a bridge at the Susquehanna, could do an almost unlimited business; and the cost for such improvements would not be one-fifth of a single track new road between the same points. The work could be accom-

plished in less than one-half the time of a new road of single track.

The number of miles run on the Philadelphia, Wilmington and Baltimore Railroad, by locomotives carrying passenger trains, during the year, was 275,032; by freight trains, 159,668 miles; by gravel, repair and wood trains, and miscellaneous, 5,080 miles. Total miles run, 439,780. Cost per mile run, 1 38-100 dollars.

It will be seen that the whole expenditures bear a ratio of 40 6-10 per cent. to revenue.

The expenditures for new work and improvements bear a ratio of 8 per cent. to the revenue. The ratio of operating expenses to revenue was 32 6-10 per cent.

That proportion of our service which has been performed for the Government has been at an average of only about two-thirds of our regular charges for both troops and their supplies. When it is considered that most of this business has been only one way, and that the cars home necessarily returned empty, it will be seen that the charges to the Government have really been but little over one-third of our usual tariff—the cost of returning an empty train being nearly the same as it would be were the train loaded. In view of all these facts, the rates to the Government must be considered very reasonable. We freely admit that such charges should always be at a minimum. This view we took at the beginning, and we believe it to be a fact beyond controversy, that this Company, and the Camden and Amboy and New Jersey Railroads, were the first railroads in Pennsylvania to reduce on Government transportation. The statement in the report of the Secretary of War, that the lines between New York and Baltimore did not reduce till after troops were sent to Baltimore *via* Harrisburg, is an error. The first troops sent that way left New York on the 21st day of June, and the reduction by the Camden and Amboy and New Jersey Railroads, and this road, took place on the 14th of May, the day on which our bridges were repaired and the road opened through to Baltimore. For the short time that our road was crippled and in operation only about three-fifths of the distance, we charged our regular fares—deeming that to be no more than equitable, as our whole force was at the disposal of the Government, and the regular rates were but an inadequate compensation.

The Burnetising Apparatus spoken of in our last Annual Report was completed and put in operation in March last. It has been in almost constant use since its completion. The amount of material Burnetized during the last year is shown by the following statement:

30,978 cross-ties,

430,320 square feet bridge timber and plank for platforms and crossings.

12,406 joint blocks.

The whole cost of material and labor for the foregoing was \$5,325 30. The expenses incident to starting the establishment were larger than the average cost will be hereafter. Should the process add to the durability of timber as much as is claimed for it, a large item of expenditure will be saved annually, after a few

years. For some time its adoption will increase our expenses; but at the period when timber in cross-ties and bridges begins ordinarily to decay, we shall begin to be repaid for our outlay by large annual savings.

We have been exempt to a remarkable degree from accidents. No one out of the large number of troops and other passengers we have carried during the year has been injured, excepting through their own fault, by exposing some part of his body outside the car. Even these cases have been extremely rare. Our trains have run at all hours of the night and the day, and our men have cheerfully and faithfully performed their laborious and responsible duties, both on the regular and irregular trains. Such exemption from accidents speaks loudly in praise of the faithfulness of the employees.

From the 18th of April last, we carried over the road between Philadelphia and Baltimore and intermediate points 154,303 troops. We also carried a large number of sick and disabled soldiers, for whose transportation we have not received any pay.

Owing to the peculiar nature of the service for the last year, it is impossible to give the details of the performance of each locomotive, as we gave them in our last annual report. The saving in burning coal instead of wood has been very large on the engines used, and as we purchase no new locomotives except coal-burners, we shall soon dispense entirely with the use of wood as a fuel for motive power.

The rebellion and its consequent work of destruction has cut off all our Southern and Southwestern Railroad connections for the time being, excepting the Washington Branch Railroad. The main trunk of the Baltimore and Ohio Railroad has been cut off since the early part of the rebellion, and our joint business with that road has in consequence ceased. This business has been heretofore a large item in our receipts. The wants of the Government and the public will, however, soon render it necessary to re-open this most important thoroughfare, and thus we shall resume our accustomed East and West business in connection with it.

Our local business has necessarily suffered during the past year, particularly that to and from the Delaware Railroad. The business for the Government has been so irregular, and has been so urgent when it came, that it has absorbed the use of nearly all our cars, to the detriment of our usual business. The consequence has been, that the apparent loss on the Delaware Railroad has been larger than it would have been otherwise by our inability to do the service required on that road. We trust now soon to be able to meet all reasonable demands for cars on that road as well as our own.

The new sidings we have been obliged to lay since April last, to enable our long trains to pass each other, measure in the aggregate, 9,264 feet. In these sidings, and in the renewal and repair of tracks, we have used 35,644 cross-ties, mostly of white oak and chestnut.

Our policy has been to steadily improve the value of the property entrusted to our care, and make it a reliable and certain dividend-paying work. We feel now that it can be relied upon with as much certainty as any other property in the country for regular dividends, which, if not extravagantly large, will be beyond the contingencies which often beset railroads in their infancy, as well as in their maturer years.

The following is the statement of earnings and expenditures:

Earnings of the Philadelphia, Wilmington & Baltimore Railroad Company for the year ending October 31, 1861.

From Passengers.....	\$1,667,275 42
" Freight and Express.....	363,552 98
" Rents.....	17,000 25
" Mails and Miscellaneous.....	46,347 73
Total Earnings of P., W. & B. R. R.	\$1,494,676 38

Earnings of the N. Castle & Frenchtown Line:

From Passengers.....	\$10,251 83
" Freight and Express.....	11,133 34
" Rents, Mails, &c.....	921 26
Total Earnings of N. C. & F. Line, ...	22,308 43

Total Earnings of both Roads for the year ending October 31, 1861.....\$1,516,984 81

Expenditures of the P. W. & B. R. R. for the year ending October 31, 1861.

Interest on Bonded Debt, Ground Rents, &c., less interest rec'd..	\$155,212 24
Operating expenses.....	488,376 47
Expenditures for new work and Improvements.....	97,044 62
Expenditures for guarding Bridges (special guards), and repairing burnt Bridges.....	22,515 35
Total expenditures of the P., W. & B. R. R. for year ending October 31, 1861.....	\$763,047 68

Expenditures of N. Castle & Frenchtown Line:

For operating expenses, repairs of Road, and all other items, except taxes and Bonus.....	\$14,393 07
Taxes and Bonus to the State of Delaware and N. Castle County, ...	11,000 00
	25,393 07

Total expenditures on both Roads.....\$788,446 75

Add loss in operating Delaware Road.....53,060 26

Total expenditures of all kinds, and loss in operating Delaware R. R.....\$841,501 01

Which deducted from gross earnings leaves net earnings for the year.....\$675,483 80

There was declared and paid, April 1, 1861, a dividend of 3 per cent.....\$168,000

Also October 1, 1861, a dividend of 3½ per cent.....196,000

Total dividends, 6½ per cent.....\$364,000 00

Surplus.....\$311,483 80

From this surplus deduct appropriation to Sinking Fund for the year.....41,666 67

And there remains a surplus over every thing, including loss on Delaware R. R.....\$269,817 13

The Balance Sheet of the Company is as follows:

DR.

Road, including Susquehanna Bridge.....\$6,827,504 28

Less Mortgage Loan redeemed during the calendar year, 1860, from the appropriation for said year to the Sinking Fund, thereby diminishing cost of Road.....40,000 00

Total.....\$6,787,504 28

Port Deposit Branch R. R.....109,514 70

Terminus on the Delaware at Washington Av. Stock owned by the Company.....11,526 76

Real Estate at Philadelphia, Wilmington, Elkton, Havre-de-Grace, &c., including a portion for the Susquehanna Bridge, and Port Deposit Branch R. R.....\$233,943 79

Less taken to Assets, as the value of property not required for purposes of the Road.....205,650 00

48,293 79

Total.....\$7,766,137 83

ASSETS.

Real Estate subject to sale, valued at 205,659 00

Stock and other securities at cost.....142,840 50

Agents' balances.....11,526 76

Sundry accounts (the principal portion being due by the United States).....125,895 78

Post Office Department.....5,674 73

Bills Receivable.....95,685 18

Other Roads and Lines.....	196,314 01
Less due to other Roads and Lines, 5,740 52	
	190,573 49
(A large portion of this sum being for transportation of Troops, &c.)	
Wood, Coal and Materials on hand, including	
Wood Lands.....	58,313 40
Cash.....	84,193 15
ADVANCES:	
To Eastern Shore R. R. Company.....	2,577 24
" Junction and Breakwater R. R. Co.	1,736 95
" Southwark R. R. Co.....	32,992 56
" Delaware R. R. Co.....	21,203 03
Total.....	\$8,742,000 61

CR.

Capital Stock.....125,000 shares, \$6,250,000	
Less held by Comp. 13,000 "	650,000
Outstanding.....112,000 "	\$5,600,000 00
Mortgage Loan, due July 1, 1884,	
Issued to October 31, 1861.....	2,342,000
Less redeemed and canceled, viz.:	
From proceeds of sale of	
real estate in 1859.....	2,000
From appropriation to Sinking Fund for 1860.....	40,000
	42,000—2,300,000 00
Improvement Bonds, due May 1, 1863.....	119,000 00
Mortgages on Real Estate.....	36,500 00
Ground Rents.....	20,000 00
Sinking Fund for Mortgage Loan, due July 1, 1884, Proportion from 1st January to 1st November, 10 months of the appropriation of \$42,000, for the calendar year 1861.....	35,000 00
Total.....	\$8,110,000 00

CURRENT LIABILITIES:	
Dividends unclaimed.....	4,066 75
Interest—Loan due July 1, 1860, unclaimed.....	103 00
Interest—Loan due July 1, 1884 ".....	435 00
Coupons—Improvement Bonds.....	3,645 00
Real Estate, waiting order of Court.....	15,230 00
Sundry accounts.....	14,485 63
Contractors.....	22,241 80
Interest—Balance accrued on all liabilities to Oct. 31, 1861, the principal portion of which is payable Jan. 1, 1862.....	50,195 00
Delaware R. R. Lease for interest accrued from July 1, to Oct. 31, 1861, payable Jan. 1, 1862, Treasurer, N. Castle & Frenchtown T. & R. R. Co.....	28,382 55
	517 33
REVENUE:	
Balance 1st November, 1860.....	220,690 36
Receipts for the year, ending Oct. 31, 1861.....	\$1,516,984 81
Less Expend. Int. &c. \$788,440 75	
" Loss on Del. R. R. 53,060 25	
	841,501 01
Net Earnings.....	\$675,483 80
Less Appropriat'n Sinking Fund, from Nov. 1, 1860 to Nov. 1, '61.....	\$41,666 67
Less Div. April 1, 1851.....	168,000 00
" October 2.....	196,000 00
	405,666 67
Surplus for year ending Oct. 31, '61.....	269,817 13
Balance of Revenue, Nov. 1, 1861, \$490,507 40	
Total.....	\$8,742,000 61

The comparative revenue for the years 1860 and 1861, is as follows:

Earnings 1861.....	\$1,494,675 38
" 1860.....	1,210,598 55
Increase.....	\$284,077 80

The officers of the road are:—

President. Samuel M. Felton. — *Directors.* Moncure Robinson, Wm. Lytleton Savage, John A. Duncan, Jesse Lane, Joseph Bringhurst, Frederick A. Curtis, John C. Groome, J. I. Cohen, Jr., Thomas Kelso, Columbus O'Donnell, Enoch Pratt, Thomas Donaldson, Wm. W. Corcoran, Edward Austin.

Secretary and Treasurer. Alfred Horner.

The earnings of the Milwaukee & Prairie du Chien Railroad for the month of June were:

1862.....	\$144,915 42
1861.....	141,771 03

Increase.....\$3,144 39

The company earned for the first six months:

1862.....	\$520,712 93
1861.....	445,048 05

Increase.....\$85,664 88

CLEVELAND & TOLEDO RAILROAD.

The annual report of the Cleveland & Toledo Road shows the business of the year to have been:

Passenger earnings.....	\$427,285 25
Freight earnings.....	576,352 07
Total.....	\$1,003,637 32
Running expenses.....	460,149 22

Net earnings.....\$543,488 10

Appropriated as follows:

Interest on Bonded Debt.....	\$269,077 53
Interest on Exchange.....	24,051 90
Profit and Loss.....	526 39
C. C. & C. Rent.....	\$66,000
Middle Ground Rent.....	7,000
Total.....	\$73,000
Less Rent rec'd from Day	
ton & Mich. Road, and	
other sources.....	6,165—66,835 00—360,490 77

Net income for the past year.....\$182,997 33

This has been consumed by the following:

Floating Debt reduced, as compared with last year.....	\$47,753 19
Contributed to Sinking Fund.....	16,104 75
Dividend paid of 3 per cent. on Stock.....	100,314 00
31 new freight cars added to Equipment.....	12,821 39
Total.....	\$182,997 33

This is equal to a net of 5½ per cent. on the capital stock.

The available assets of the company are sufficient to pay the remainder of the floating debt.

The bonded debt is \$3,673,620, of which \$221,000 are due in November next, and \$918,000 in 1863.

The Income Account shows a balance of \$211,317 71 as undivided net earning since the closing of Construction Account to May 1st, 1862, \$100,314 having been divided April 25th, 1862, as a 3 per cent. dividend upon \$3,343,800 of capital stock.

The earnings for the past year have been.....	\$1,003,637 32
Running expenses for the past year.....	460,149 22

Balance.....\$643,468 10

Expended in part as follows:

Interest on bonds.....	\$269,077 58
Interest on exchange.....	24,051 90
Rents paid.....	\$73,000
Less rents received.....	6,000—66,835 00
Profit and loss.....	526 29—360,490 77

Net earnings.....\$185,997 33

Dividend No. 8, 3 per cent. on \$3,343,800 capital stock.....	\$100,314 00
Contribution to sinking fund.....	16,108 75
Expended in new cars.....	21,560 00
Invested in bonds of Toledo, Logansport & Burlington Railroad Company, as per contract.....	6,000 00
Applied to liquid'n of float'g debt.....	47,753 19

Using a small portion of the earnings of the previous year in the expenditure equipment.

During the year, \$372,000 of Sinking Fund Bonds have been exchanged for bonds of other issues, as follows:

Junction R. R. Income Bonds due June 1, 1862.....	\$21,500
Junction R. R. 2d Mortgage Bonds, due Nov. 1, '62, 44,000	
C. & T. R. R. Income Bonds, due Sept. 1, 1863.....	22,500
C. & T. R. R. Income Bonds, due July 1, 1864.....	166,000
C. & T. R. R. Dividend Bonds, Due April 1, 1865.....	10,725
C. & T. R. R. Divid. Certificates, due April 1, '65, 550	
Junction R. R. 1st Mortgage, 1st Division Bonds, due April 1, 1867.....	60,000
C. & T. Income Bonds, due Sept. 1, 1870.....	3,000
Junction R. R. 1st Mortgage, 2d Division Bonds, due Dec. 1, 1872.....	44,600
Toledo, Norwalk & Cleveland R. R. 2d Mortgage Bonds, due Aug 1, 1863.....	100

Total.....\$371,975

We exchanged the previous year.....217,850

Total amt of Bonded Debt converted in two years, \$579,825

ANNUAL REPORT OF MICHIGAN CENTRAL RAILROAD.

The annual report of the Michigan Central Railroad shows:

The Gross receipts for the year have been.....	\$2,368,588 57
Operating expenses.....	\$1,096,315 13
State and other taxes.....	62,837 81—1,149,152 94

Net receipts for the year.....\$1,219,435 63

Amount of int. and exchange.....\$673,403 49

Amount paid to sinking funds.....84,500 00—763,963 09

Total.....\$455,472 54

Add balance of income acct from last year.....38,434 24

Total.....\$493,906 78

Deduct 3 per cent. dividend of Feb. 5, 1862.....151,713 00

Balance to the credit of income acct.....\$342,193 78

The debt of the company is \$7,626,793 74, showing a decrease during the year of \$205,502 46. There is no floating debt. The gross earnings show an increase of \$303,189 81 with an increased expenditure of only \$17,119 63, which speaks well for the management. The general account on the 1st of June is given as follows:

To capital stock.....\$6,057,710 00

Bond account, to-wit:

6 per cent sterling bonds, unconvertible 1st mortgage.....	\$467,468 89
3 per cent sterling bonds, convertible 1st mortgage.....	500,000 00
3 per cent bonds, convertible 1st mortgage.....	2,593,000 00
3 per cent bonds, convertible 1st mortgage.....	4,434,000 00—7,999,468 89
To income account, balance of this account.....	312,193 78
Unpaid dividends.....	1,781 00

Total.....\$14,371,173 67

By construction, No. 1, purchase of road.....\$2,000,000 00

By construction, No. 2, expenditures since purchase.....10,847,238 17

Available as cash, to-wit:

Cash on hand.....	\$59,595 58
Loaned on call.....	49,550 00
U. S. Government Certificate of indebtedness at par.....	100,000 00—206,145 58
Accounts and bills receivable.....	134,667 30
Assets in hands of O. Macy, general receiver.....	25,701 99
Assets in hands of R. N. Rice, gen'l suptd.....	34,755 55
New Albany & Salem Railroad stock.....	609,768 69
Juliet & Northern Indiana Railroad stock.....	162,225 00
Juliet & North'n Ind. Railroad construction.....	40,768 18
Steamboats.....	304,007 89

Total.....\$14,371,173 67

The income from passenger, freight, and other earnings, and the per cent. of earnings used in operating expenses, exclusive of the tax, since 1857, are as follows:

Yrs end'g	Passengers.	Freight.	Miscellan's.	Pr. cl. op'g
May 31.				expenses
1857.....	\$1,610,415 75	\$1,413,492 47	\$80,694 47	64 6-10
1858.....	1,321,939 56	1,033,748 32	73,869 64	59 6-10
1859.....	938,609 39	831,435 46	68,848 82	53 4-10
1860.....	803,577 97	92,631 70	66,815 19	53 7-17
1861.....	775,227 53	1,218,316 29	64,637 79	51
1861.....	724,915 48	1,559,000 93	77,264 96	45 1-19

The floating debt, which a year ago was \$125,000, has been liquidated. The company has no unfunded debt. There has been paid during the year \$250,000 of unconvertible plain bonds, which matured on the 15th day of May last, by the proceeds of the sale of the same amount of Sinking Fund bonds at prices ranging very nearly par.

There has been an increase of the bonded debt during the year of \$31,000, caused by the sale of bonds heretofore held by the company. The bonded debt now stands at the limit of the mortgage, and all of the bonds are secured by the first and only mortgage upon the road for \$8,000,000, while the principal part of

This issue of bonds is intended to cover the entire issue of bonds of the company, and to

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	48		\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.	65	380	13,111,800	10,781,833	566,070	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do										" " " " " "	2,500,000	6	88	1885	
do do										" " " " " "	700,000	6	84	1880	
do do										" " " " " "	1,128,500	6	90	1875	
do do										" " " " " "	1,000,000	6		1867	
do Washington Branch.....	Md.	30		1,650,000						" " " " " "	791,000	7	55	1866	
Bellefontaine and Indiana.....	Ohio & Ind.	118		1,859,813	1,256,750	139,129	314,000	8,795	Dec. 1860.	1st Mortgage.....	160,000	7		1870	
do do										2d " " " " " "					
Buffalo and State Line.....	N.Y. & Pa.	122 1/2	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	132 1/2	96	3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	450,000	6	100	1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	800,000	7	80	1864	
do do										1st " " " " " "	800,000	7	64	1865	
do do										2d " " " " " "	950,000	7		1865	
do do										3d " " " " " "	1,365,800	7		1876	
do do										4th " " " " " "	1,400,000	7	106	1865 & 1870	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	600,000	7	100	1875	
do do										2d " " " " " "	2,000,000	7			
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d " " " " " "	1,535,000	7			
do do										3d " " " " " "	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d " " " " " "	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	104		2,897,750	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	80	Feb. & Aug. 1	
do do										2d " " " " " "	3,500,000	7	48	Feb. & Aug. 1	
do do										3d " " " " " "	2,000,000	6	26	May 1.	
Chicago and Rock Island.....	Ills.	52 1/2	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	105	1870	
Chicago, Burlington and Quincy.....	"	76 1/2	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	106 1/2	1863	
do do										" 2d " " S. F.	813,000	8	106 1/2	1890	
do do										1st Mor. Chi. & Aur.	399,000	7		1867	
do do										2d " " " " " "	303,000	7		1869	
do do										1st "Cent. Mil. Tract	392,000	7		1864	
do do										2d " " " " " "	215,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	99	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d " " " " " "	950,000	7	100	1880	
Cincinnati Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d " " " " " "	532,000				
do do										3d " " " " " "	104,000				
do do										Income.....	305,509				
Cleveland and Mahoning	Ohio.	68 1/2		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d " " " " " "	469,000	7			
do do										3d " " " " " "	344,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	214	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1860	
do do										2d " " M. L. or 1st Ex.	1,188,000	7	91	1873	
do do										3d " " Ex.....	1,165,000	7	80 1/2	1865	
do do										4th " " Ex.....	1,154,000	7	64		
Cleveland and Toledo.....	Ohio.	47 1/2	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jan. 1st Div.	359,000	7	65	1867	
do do										1st " " " 2d Div.	263,000	7	65	1872	
do do										2d " " " " " "	265,000	7		1862	
do do										1st "Tol. Nor. & Clev	521,000	7	75	1863	
do do										2d " " " " " "	293,300	7	75	1864	
do do										Junction Income.....	44,500	7		1862	
do do										C. & T. Income.....	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	123	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	125	98 1/2	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	99	1861	
do do										2d " " " " " "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	105 1/2	54 1/2	1,490,000	290,700	50,500	See L. Miami.			Dividend.....	272,700		92	1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666	2,512,000					2d " " " " " "	2,212,000	8			
do do										1st Mortgage.....	300,000	7	50		
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	2,500,000	7		1875	
Detroit and Milwaukee.....	Mich.	186		No report						2d " " " " " "	1,060,900	8		1866	
do do															
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	737,734				
Evansville and Crawfordsville.....	Ind.	132		96,061	1,219,100	949,688	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.											
Galena and Chicago Union.....	Ills.	72 1/2	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	400,000				
do do										2d " " " " " "	181,000				
Great Western.....	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage.....	1,993,000		103	1862 & 1863	
do do										2d " " " " " "	1,520,000		100	May 1, 1875	
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report					1st Mortgage W. D.	1,041,000	10			
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573		1st " " " " " "	1,350,000	7			
Hannibal and St. Joseph.....	Mo.	206		1,041,066	10,554,000	220,316	996,907	512,933	Sept. 1, 1860.	Land Mortgage.....	5,000,000		26		
do do										Mortgage Conv.....	1,354,000		40		
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	927,000	6	99	1873	
Hudson River.....	N. Y.	45	144	3,758,466	9,107,000	162,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	108	1869 & 1870	
do do										2d " " " " " "	2,000,000	7	106	1870	
do do										3d " " " " " "	1,840,000	7	93	1875	
Illinois Central.....	Ills.	63 1/2	455	15,654,900	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000	7	93	1869	
do do										Construction.....	12,885,000	7	64	1869	
do do										" " " " " "	4,115,000	6	92	1875	
do do										" " " " " "	42,740	7	96	1875	
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	Debentures.....	600,000	7			
do do										1st Mortgage.....	578,000	10			
do do										2d " " " " " "	38,700	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,852	230,834		Income.....	500,000	7	85	1866	
do do										1st Mortgage.....	400,000	7			
do do										Real Estate Mort.....	200,000	7	85		
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	1st Mortgage.....	649,954	7	62		
do do										2d " " " " " "	314,000				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report								
Iowa Iron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	When Payable.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st 289,000		75		1861	
do										2d 392,000		70		1873	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage..... 160,000	6				
do										1st 260,000	7				
do										2d " Conv. 1,000,000	7				
do										3d " 600,000	7				
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D. 901,000		89			
do										2d " E. D. 1,000,000					
do										1st Land Grant W D 4,000,000		21			
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage..... 130,000	6			1883	
Lexington and Frankfort.....	Ky.	99		514,433	130,000		105,944	43,267	June 30, 1861	1st Mortgage..... 1,300,000	6				
Little Miami.....	Ohio.	65					1,330,050	529,981	Jan. 1, 1862	City Loan..... 174,000	6				
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		245,910	98,679	June 30, 1861	1st Mortgage..... 248,000	7				
do										1st Mortgage..... 2,000,000	7				
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br. 400,000					
do										1st " Memphis Br. 500,000					
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage..... 600,000	7			1861	
Marietta and Cincinnati.....	Ohio.	208		8,361,213	196,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv 2,500,000	7			1868	
do										2d " 2,000,000	7				
do										3d " 1,500,000	7				
do										Sterling Income... 333,000	4				
do										Domestic 928,817					
Michigan Central.....	Mich.	59	284	6,057,784	7,968,429	125,000	2,126,699	910,169	May 31, 1861	1st Mortgage Sterling 467,483	6	98½		1872	
do										1st " Conv. 500,000	8	84		1869	
do										1st " unconv. 250,000	8	96		1860	
do										1st " Dollar Conv. 2,500,000	8	104½		1869	
do										1st " S. F. Conv. 4,153,000	8	106½		1882	
Michigan South'n & North'n Indiana	Mich. &	24½	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. So. 991,000		99		1860	
do										" Nor. Ind. 985,000		103		1861	
do										" Goshen Line. 1,168,000		100½		1868	
do										S. F. Toledo 2,850,000				1885	
do										2d Mortgage 2,465,000		4½		1877	
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage..... 400,000	8				
do										2d " 200,000	7				
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage..... 420,000	8				
do										2d " 600,000	8				
Milwaukee and Prairie du Chien.....	Wis.	27½	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage..... 2,556,000	7	99		1891	
do	Wis.	71		No report											
Mississippi and Missouri.....	Iowa,	35		No report						1st Mortgage Conv. 1,000,000	7				
do										2d " S. F. 400,000	8				
do										Oskaloosa Div. 1,425,000	7				
do										Land Grant..... 7,000,000	7				
New Jersey.....	N. J.	13	34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage..... 711,000		102½			
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.						
New York and Erie Pref.....	N. Y.	62		Sold under mortgage			5,500,916	1,979,408	Sept. 30, 1860	1st Mortgage..... 3,000,000		105			
do		35								2d 4,000,000		104			
do										3d " 6,000,000		99			
do										4th " 4,900,000		86			
do										5th " 1,792,500		88½			
New York and Harlem Pref.....	Conn.	44	138	5,717,190	6,055,752	.....	1,142,851	433,716	Sep. 30, 1860.	1st Mortgage..... 2,950,000	7	102½		1873	
do		13								2d " 1,000,000	7	91		1864	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage..... 912,000	7	102½		Dec. 1, 1866	
do										" 978,000	6	101		Oct. 1, 1875	
New York Central.....	N. Y.	90	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H. 7,925,000	6	106½		May 1, 1883	
do										Mortgage..... 3,000,000	7			June 15, 1884	
Northern Central.....	Mo.	138		2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction..... 2,080,500	6				
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan..... 4,350,000	6				
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased.	9,280,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage..... 2,193,500	6				
do										3d " 316,995					
do										Construction..... 4,637,920					
do										Income..... 3,591,185					
Ohio and Mississippi, Western Div....	Ills.	148		.....	3,292,403		No report			State Loan..... 7,000,000					
Pacific.....	Mo.			3,199,662	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	" " S. W. 2,800,000	6				
do										Construction..... 4,500,000	6				
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv. 4,905,000	6	104½		1888	
do										2d " 2,319,000	6	98½		1875	
do										2d " Sterling. 1,937,440	6			1875	
do										State Works..... 7,200,000	5	89			
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report								
Philadelphia, Wil. and Baltimore.....	Del.	98		6,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage 2,300,000	6	99½		1884	
do										Improvement..... 119,000	6			1863	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,757,273	2,355,353	761,555	June 30, 1861	1st Mort. O. & P. 1,000,000	7			1865	
do										2d " 750,000	7	78		1866	
do										1st " O. & I. 1,000,000	7			1872	
do										2d " 380,000	7			1873	
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,533	29,690	Oct. 31, 1860.	Pittsburgh Subs'n. 500,000					
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.						
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,000	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage..... 125,000	10			1856	
do										" 997,000	7			1866	
do										" 1,000,000	7			1875	
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage..... 1,290,000	7			1880	
do		56		401,975	500,000	100,000	110,200	53,100							
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage..... 500,000	7				
do										2d " 450,000	7				
Staubenville and Indiana.....	Ohio.			No report						1st Mortgage..... 1,500,000	7			1870	
do										2d " 900,000	7			1865	
Terre Haute, Alton and St. Lous....	Ills.	208		No report						1st Mortgage Conv. 1,000,000	7	110		1862	
do										2d " Conv. 2,000,000	7	80		1868 & 1870	
do										1st " Bel. & Ill. 517,000	7			1873	
Terre Haute and Richmond.....	Ind.	100	73	1,321,450	230,000	none.	377,092	216,183	Dec. 1, 1861.	1st Mortgage..... 230,000	7	91		1866	
do	Ohio & Ind	5½	243	2,123,500	5,096,049	52,389	233,546			1st Mortgage..... 3,400,000	7	59		Aug. 1, 1865	
do										2d " 2,500,000	7			Nov. 1, 1872	
do										Mort. Coupons.... 90,000	7			1860 to 1865	

be exchanged at par for the other classes of outstanding bonds, at the option of and on presentation by the holders of the other bonds. Exchanges have been made during the past year to the amount of \$371,000, and the total amount now outstanding, which have been exchanged, is \$1,545,000. None of the Sinking Fund bonds have ever been sold or put upon the market by the company.

Respectfully submitted, by order of the Directors,
JOHN GARDINER, President.

DECISION REGARDING THE HARTFORD AND NEW HAVEN RAILWAY COMPANY.

The above company have been compelled, by mandamus, to run their trains to the terminus at the Harbor of New Haven, for which the charter originally provided. The terminus used of late has been the New York and New Haven Station, in New Haven.

The State of Connecticut, by her Attorney General, applied to the Superior Court for a *mandamus* against the Hartford and New Haven Railroad Company to compel them to run passenger trains to the original terminus of their road at the navigable waters in New Haven Harbor; they have constructed a track diverging from the original track at a point a mile and a half from its terminus at tide water, and running to the station of the New York and New Haven Railroad Company in the city of New Haven, and discontinued running passenger trains to the old terminus.

The application alleged that the respondents were incorporated by the Legislature of the State in the year 1833, with power and for the purpose of constructing and operating a railroad for the transportation of freight to the navigable waters of New Haven Harbor at some point between the canal basin and the west end of Tomlinson bridge, and by a later act were empowered to extend their road to the north line of the State, and thence, with the assent of the State of Massachusetts, which was soon after obtained, to Springfield in that State; that the connection of the road at Springfield with various important roads leading in all directions made it a thoroughfare of great importance; that the road connected at its terminus at New Haven Harbor with a line of steamboats, which was established and run for the transportation of persons and freight from the said railroad to the city of New York, and from the latter to said railroad; and that said railroad and line of steamboats had for a long time constituted a direct and important route for the public travel, greatly accommodating the same, and necessary to the public convenience; and that the respondents were obliged, by the terms of the charter, to run their cars and transport passengers to said terminus, to such an extent as to afford reasonable accommodations to the traveling public; but that the respondents, some time before the bringing of the application, had wholly discontinued the running of the passenger trains to said terminus, although they had been often requested to continue them by persons desirous of being transported over that part of the road, and that they now wholly refused to run their passenger cars over that part of their road.

The Superior Court issued an alternative *mandamus*, and the respondents then came into court and filed their return. The substance of the defense was, first, that they were not required by their charter to run the passenger trains to the terminus in question; and,

second, that in March, 1850, they had entered into a contract with the New York and New Haven Railroad Company, the object of which was, among other things, to prevent the extension of a certain railroad in that State, known as the Canal Railroad, beyond a certain station known as Granby station; and in consideration of the covenants and agreements the respondents agreed, among other things, that they would pay \$1,000 per month to the New York and New Haven Railroad Company during the continuance of the contract, and until July, 1869, and that they would not run any passenger trains during said term, in connection with any steamboat running between New York and New Haven, and would not run any passenger trains to or from the steamboat dock in New Haven; but would run all their passenger trains to and start them from the station near Chapel street, on the road of the said New York and New Haven Railroad Company. That the term of this contract has not yet expired and the New York and New Haven Railroad Company insisted on the observance of said contract as binding and obligatory upon the respondents.

The Attorney for the State demurred to the return, and the case was reserved by the Superior Court for the advice of the Supreme Court of Errors of the State. The following is the opinion, delivered after argument, and at the decision of the case; declaring that it was the duty of the company to continue the running of its passenger trains to the original terminus; they being required to do so by their charter, no contract with another company could absolve them from this obligation; and the people at large had the right, it being for their convenience, to require trains to be run as formerly; and that *mandamus* was the proper remedy.

ELLSWORTH, J.—We consider the return made by the respondents to the *mandamus* unsatisfactory and insufficient, presenting no reason why the order should not be immediately executed.

The respondents admit that they have accepted, made and completed their road as required, and for years have continued to run cars upon it for freight and passengers to and from tide water in the harbor of New Haven in connection with steamboats from New York; and they do not deny that they are now using that part of their road for the transportation of freights, but they refuse, and have for some time past refused to use it for the transportation of passengers. And it is substantially admitted by the return that the public convenience will be subserved by the use of this part of the road.

Now it is difficult to perceive upon these premises upon what grounds the respondents can justify their refusal to perform their entire corporate duty; how they can expect to retain their franchise, and pay no attention to the duty it enjoins upon them. The contract with the New York and New Haven Railroad Company, that they will not permit the public to enjoy the benefit of this part of their road, amounts to nothing. It is in our judgment an aggravation of their censurable neglect of duty, instead of a legal excuse for the neglect. What right have they to covenant with that corporation, that they will not run cars to tide water, as the charter provides that they shall, and as the public accommodation requires, especially when they enter that covenant to secure to that corporation a monopoly of the public travel to and from New York, and, as an equivalent to secure to themselves a like monopoly of all the

travel in the Connecticut valley, to the prejudice of every other corporation, that might have an interest in those routes? The whole proceeding from first to last seems to us to be in contravention of the charter obligations of both these companies, and to present a case of arduous monopoly, if not of positive oppression and wrong, which can receive no countenance from any impartial tribunal.

We hardly know what doubtful principles of law are thought to be involved in the case. The respondents certainly were bound to make their road (if at all) within the time prescribed in the charter; and, having made it, to put into use every material part of it, and keep it in use until discharged by the Legislature. And this continuous duty is in no manner inconsistent with the power in the company, (which has been so much dwelt upon in the argument) to regulate and control the manner of using the road by wholesome rules and by laws. These we admit are necessary and allowable; but then they must be such as are really promotive of the original design of the charter, and not such as tend to defeat that design. Under the contract in question, viewed in the most favorable light, persons traveling by railroad down the valley of the Connecticut, and desiring at New Haven to take the steamboat for New York, and desiring to take the cars, must necessarily be exceedingly incommoded; while this very course of travel was well known when the charter was granted, and was intended to be secured and promoted by it.

We forbear going into other questions raised on the trial, or commenting upon the authorities cited by counsel. We think it unnecessary and prefer to place our decision upon the simple ground of the corporate duty of the respondents. All jurists and judges will at once agree that chartered companies are obliged fairly and fully to carry out the objects for which they are created, and that they can be compelled by *mandamus* to do it; and it will not be questioned that in the case of public highways, whether turnpikes or railroads, they are bound to keep them fit for use, and, in the case of railroads, to keep them furnished with suitable cars, engines and attendants, without which they can not be used at all. We advise the issuing of a *peremptory mandamus*. In this opinion the other judges concurred.

THE FOOD QUESTION—PEACE WITH THE UNITED STATES A NECESSARY CONDITION FOR OTHER COUNTRIES.

However much England and France may suffer from the want of an abundant supply of raw cotton for their manufacturing establishments, it is very clear that they are, particularly England, quite as dependent upon this country for food, as they have been in times past for our other great staple. England is now compelled, with good seasons, to import no small proportion of the food her people consume. Every year adds to the amount, which increases in much greater ratio than her population. In wheat and flour alone, she took from us at least \$50,000,000 during the year ending July 1st, 1861. For that just closed she has taken a much greater amount, as the last crop in that country was a very meagre one. Should the present be good, still, as there is no surplus in that country, the demand from this will probably continue very nearly in ratio to the past, till sev-

eral good crops shall, by relieving all apprehension, seriously react upon prices. Such is the conviction of parties in the trade there, so that the prospect of a fair crop will, for the present, exert but very little influence in weakening prices, or demand from that.

It is certain, but for the United States the prices of breadstuffs in England the past year would have created a much greater commotion than has the lack of cotton. The demand for food is far more imperative than clothing, especially a single variety of clothing, and must be had in very nearly the same quantity, whatever may happen; whether a people be prosperous or the reverse, or whatever may be the condition of commerce or trade. The Southern States have, heretofore, been the source of supply of cotton. This is now, temporarily perhaps, cut off. Shall the evil be aggravated by shutting out food from vast multitudes who are either unemployed, or who are working upon short time? Shall two evils be courted instead of one? If one is so vast as to defy almost treatment or solution, will not a still graver one added be too much for the strength or foresight of government? We do not refer to other matters; but it is clear that a state of things that would sever the commercial relations between the two countries would interfere with other relations, mutually injurious very probably, but none the less to be considered than the question directly at issue.

This question is not whether England might not obtain supplies of breadstuffs from other sources sufficient to keep her people from starving, but whether she can obtain them at rates that will place them within reach of the working classes. Prices are controlled by a deficit or excess, however slight this may be. It might be supposed that a deficit equal to one-twentieth of the whole amount wanted, would raise prices only in an equal degree. But the necessary result is, that they augment in vastly greater ratio, as it places the holders in position to exact their own terms. Now prices are kept down in England by the certainty that the United States can always be relied on to make good any deficiency that may be found to exist in that country. Apprehension is relieved, and though there may be a brisk demand, prices will never advance very far beyond cost of production, including, of course, interest on the amount of capital employed.

In our crops of breadstuffs, consequently, we have a good guarantee for continued peace. The abundant supply from this country, steadily increasing, has, unconsciously to nations of the Old World, rendered our own indispensable almost to their comfort, and internal peace and quiet. We have during the past ten years been busily occupied in preparing this country to be the great grain mart for the world. We had abundant area, and climate admirably adapted to the production of all the cereals at less cost than in any other country in the world. What we lacked was means of transportation, the best producing districts being 1,500 miles inland. The appropriate works have at length been constructed. Railroads traverse every portion of the interior, collecting at the great depots upon navigable water lines the bountiful products of the soil, which are borne to tide water chiefly by means of one work—the Erie canal. There were transported over this route the past year, in grain and flour, what was equivalent to 70,000,000 bushels. The two great railroads of the State added 40,000,000 bushels more. The works which private and public enterprise have constructed

in this State are the most beneficent agents in ministering to the comfort and order of the old world—agencies which are hardly more noticed than the operations of Nature but which convert all these to the use and benefit of man.

Having labored so assiduously to promote the good of the people of the Old World, as well as ourselves, we do not think our good offices will be rudely thrown aside. Never was a grander achievement than our public works, which were made for mankind, instead of a comparatively isolated nation. Last year they saved both England and France all the horrors of famine. They can continue to do so for all time. The people of those countries do not, of course, recognize their benefactors, but let them be cut off from these, and they will instantly learn their value and instantly demand the restoration of former relations, in tones that can not be misunderstood or denied. We are now and are henceforth to be the grainery of the world, and are almost as indispensable in the general economy, as food itself. The office we perform will not be lightly esteemed, nor will it be long rejected, as its benefits will be seen the moment they are withdrawn. Neither England nor France will long forego their customary amount of food for the sake of interfering in a matter which they will not appreciate—an interference which can not result in a single compensating advantage for the thousand ills that must follow.—*Hallett's Financial Circular*.

MONETARY AND COMMERCIAL.

Financial affairs have been undergoing a series of panics during the last ten days, evidently gotten up by the speculators of New York and dealers in foreign exchange. Many of these parties are full rebels, disguised to save their necks and dollars, but seizing upon every pretext and opportunity to embarrass the government, and speculate on the misfortunes of the country. Gold has fluctuated during the week considerably, and the quotations of one hour will not answer for the next. The premium on gold in New York has been as high as 20 per cent, and on silver 12 per cent; these prices, however, were not sustained, and the latest quotations are 10 premium on silver and 14 on gold. The New York Herald speaking on this subject says, "The opponents of the government and the secret sympathizers with the rebellion—of whom not a few are engaged in drawing or selling exchange on Europe—have taken advantage of the pending panic to denounce Mr. Chase's policy, and to renew the clamor they made when that policy was first inaugurated. It is difficult to see, however, what policy would have protected the public credit against injury when unfavorable news came to hand. If Mr. Chase, for instance, had been relying for means to carry on the war upon loans negotiated upon terms dictated by foreign bankers in New York, the battles before Richmond would have caused an enormous depreciation in government stocks, and would have enabled the bankers to extort sales of these stocks at 20@30@40 per cent discount. It is

evidently better, both in a financial and political point of view, for government to pay a little more for supplies and to keep its stocks at premium, than to buy its supplies at the cost of production, and at the same time to see New York sixes selling at 60@70. The premium on gold and silver—which has withdrawn them from circulation—is to be regretted. But it is neither unexpected nor irredeemable."

The Herald further remarks that "Every dollar of specie now exported yields a handsome profit to the country. Gold is our third greatest staple product. An advance of 15 per cent. in the value of gold is equivalent to an advance of 15 per cent. in wheat, corn, pork or cotton. Until foreign goods rise in an equal ratio, which they have not done thus far, the premium on gold comes out of the pockets of foreigners. And, on the other hand, the advance in gold leads necessarily to an active development of our export trade. Every one who has any produce or merchandise to sell is now selling it abroad, for the sake of the high premium on bills. Not only are we shipping breadstuffs and provisions in unusual quantities, but leather, tobacco, copper, products of the sea, etc., etc., are going out to Europe at a rate unprecedented. Meanwhile the advance in exchange is simultaneously putting a stop to all needless imports. Thus, in the course of a very short time, the exchanges must be largely in our favor, the utter groundlessness of a premium on gold must become manifest, and, if hoarding here continues to keep it above par, we must receive a new supply of bullion from Europe."

Whether the predictions of the Herald are true or not as to the return flow of bullion from Europe, it is certainly true that we ought to be able to share a portion of the many millions that flowed to our coffers last year, without causing the panic that now exists. Europe has got to have our food, and to the extent of what we send her we can afford to buy of her in return, especially of such things as we do not produce ourselves. The condition of the country is now such that in a great measure the means for the support of government will have to be raised by the direct tax, and we trust that the wisdom of Congress will produce such a judicious tariff system as to admit the absolute necessities of life, but will cut off by prohibitory rates all such as can be produced at home, or as may be classed among the extras. It is certainly unnecessary and useless to ship Cincinnati whisky to Europe at 13, 20, 25, or 30 cents per gallon, and to buy the same back again, not as good as it went away, at \$1 00, \$1 50, \$2 00, or \$4 00 per gallon; the million sent abroad for the finer classes of dry goods, could the tastes of our people be more properly cultivated and harmonized to goods of domestic production, would be retained at

home, and so on through a long catalogue. We are not only an extravagant people, but we are also wasteful. This is a habit that needs great correction, and will aid much in reducing our payments abroad, and the consequent outflow of gold.

The demand for money is quite limited and easy at the usual rates. Exchange is in good supply with a very moderate demand. The quotations are

	BUYING.	SELLING
New York,.....	1/2 @ 1/2 dis.	par.
Boston,.....	1/2 @ 1/2 dis.	par.
Philadelphia,.....	1/2 @ 1/2 dis.	par.
Baltimore,.....	1/2 @ 1/2 dis.	par.
Gold,.....	15 1/2 @ 16 prem.	17 prem.
Silver,.....	8 prem.	10 prem.
Demand Notes,.....	6 1/2 prem.	.....

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:30 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day., Toledo & Day. Huntsville.....	5:20 P. M.	10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Terre Haute and Lafayette and Chicago Mail.....	5:05 A. M.	11:10 A. M.
Indianapolis and Chicago Night Express.....	3:20 P. M.	11:50 P. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Evansville and St. Louis Mail.....	5:40 A. M.	10:45 P. M.
Evansville Accommodation.....	3:00 P. M.	8:45 A. M.
Evansville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

General Ticket Agent Indianapolis & Cincinnati Railroad.

General Ticket Agent Ohio & Mississippi R. R.

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.

Tube CLEANERS, Steel Wire and Whalebone BRUSHES.

Artesian Oil and Salt WELL-TUBING. Lap-Welded Steel BOILER TUBES. Glass Enamelled Iron WATER PIPE. Wrought Iron GAS and STEAM PIPE. Wrought Iron HOT WATER APPARATUS, for warming Horticultural Buildings. Ventilating do for dwelling Houses, &c. HOT WATER GAS STOVES, for Plant Windows, Piazza Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES. Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,

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INSTRUMENT MAKERS,

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(Two Premiums 419 by Franklin Institute.)

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANA POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily for the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M., Quincy at 12:55 P. M., Palmyra at 2:15 P. M., St. Joseph at 12:30 A. M., Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M., Lafayette at 1:40 A. M. Chicago at 6:00 A. M., connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,

W. H. L. NOBLE,

General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,

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CINCINNATI

ERIE RAILWAY.

Great Broad Gauge, Double Track and Telegraph Route

TO

NEW YORK, BOSTON, AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DENLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6.

CHARLES MINOT, Gen'l Sup't.

Baltimore and Ohio Railroad

RE-OPENED!



This great national thoroughfare is again open for

Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition,

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.

J. H. SULLIVAN, Gen. Wagon Agent, Baltimore, O.

L. M. COLE, Gen. Ticket Agent, Baltimore.

1861. 1861
FAST TIME.
LITTLE MIAMI
 (AND)
COLUMBUS AND XENIA
 AND
CINCINNATI, HAMILTON & DAYTON

RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express.—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation.—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad for Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation.—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Richmond, Indianapolis, and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation.—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express.—From Cincinnati, Hamilton and Dayton Depot.—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,
General Ticket Agent

Omni-buses call for passengers by leaving directions at the Ticket Offices.

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W. MORRILL. G. B. BOWERS

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 (Successors to and members of the late firm of
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 Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the highest quality in style, workmanship and material.

Orders are respectfully solicited, with the assurance that pains will be spared to give entire satisfaction in every case.

1862. 1862.
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285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
 FOR SAFETY, COMFORT AND SPEED,
 TO ALL THE EASTERN CITIES!
 THE TRACK IS STONE BALLASTED
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THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
 (with close connections from Western Cities.)
 ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
 AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
 ONE TRAIN RUNS DAILY (430 MILES.)
 VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
 Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
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TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
 BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE.

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 ON NIGHT TRAINS TO
 Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

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By this Route Freight of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburgh.

CLARKE & CO., Transfer Agents, Pittsburgh.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

W. W. ALKMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.

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W. H. & E. L. LANGLEY, Gallipolis, Ohio.

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H. S. PIERCE & CO., Zanesville, Ohio.

MCDOWELL & McCOLM, Portsmouth, Ohio.

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Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

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H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

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Chilled Railroad Car Wheel, Tyre,

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CHILLED WHEELS

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Either Single or Double Plate,

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WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

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Opened for Business May 13, 1861.

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42 Miles Shorter than any other Route
NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M., 3:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M. and run directly through to Chicago without rebilling or transhipment.

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FOR 1861

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THE NAMES AND RESIDENCES

OF THE

PRESIDENTS, DIRECTORS

AND

OFFICERS

OF ALL THE RAILROADS IN THE

UNITED STATES

they could be ascertained.

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BROAD AND HAMILTON ST.

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Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, JULY 24, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

the space occupied by ten lines of Nonpareil—	
square, single insertion.....	\$1 00
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
column, single insertion.....	5 00
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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—		
	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	10.10 A. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.10 A. M.
Sandusky, Dayton & Cincinnati—		5.40 A. M.
Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.10 A. M.
Marietta & Cincinnati—		
Mail.....	9.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.
Ohio & Mississippi—		
Mail.....	5.05 A. M.	10.05 P. M.
Seymour Accommodation.....	3.40 P. M.	8.45 A. M.
Express.....	5.00 P. M.	6.53 A. M.
Indianapolis & Cincinnati—		
Mail.....	5.05 A. M.	11.10 A. M.
Chicago Express.....	3.20 P. M.	11.50 P. M.
Dayton & Michigan—		
Tolledo, Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Tolledo & Chicago Express.....	5.20 P. M.	10.10 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	10.40 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.
Kentucky Central— (City time.)		
First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

UNION PACIFIC RAILWAY.

The Pacific Railway bill, as it passed Congress, is much more liberal in its provisions than was generally supposed. The capital stock is to consist of one hundred thousand shares of one thousand dollars each, (one hundred millions,) and not more than two hundred shares shall be subscribed for and held by any one person. The first meeting of the Commissioners is to be held at Chicago within three months after the passage of the act—notice of which to be given by the Illinois Commissioners. Stock subscription books are to be opened in the principal cities, and ten per cent. of all subscriptions to be paid down. This is a good provision, and will keep out bogus subscriptions. After two thousand shares are subscribed the company is to be permanently organized by the stockholders—the President of the United States having the right to appoint two Directors in addition those elected by the stockholders.

The right of way through the government lands is four hundred feet wide—with the privilege of using the materials necessary for the construction of the road that may be found on the lands adjoining—the United States agreeing to extinguish the Indian titles as far as possible. In addition to the right of way, the Company is granted every alternate section of land, for ten miles on each side, of public land not sold, or entered, through which the road may pass—the government reserving to itself any mineral lands that may be found on the line of the road. The lands granted to the Company, if not sold or otherwise disposed of within three years, are to be subject to entry and pre-emption at a price not exceeding one dollar and a quarter per acre, to be paid to the Company.

Whenever forty consecutive miles of road are completed in first style, and laid with American rails, and with all the fixtures and appurtenances of a first class road, patents to the land are to be issued for the lands on each side of the road according to the grant above mentioned. And so on for every forty consecutive miles completed.

In addition to the land grants, the Secretary of the Treasury, whenever forty miles of railway and telegraph are completed agreeably to the stipulations of the act, is to issue sixteen one thousand dollar bonds payable in thirty years, at six per cent., for every mile of road so completed—the bonds constituting a first mortgage on the road; five per cent. of the earnings of the road, and all charges for transportation of public property, mails, etc., to be reserved as a sinking fund toward the payment of the bonds.

When the road is completed to the Rocky and Sierra Nevada Mountains, the bonds to be issued are to be trebled—\$48,000 per mile for the mountain districts—and issued on the completion of every twenty consecutive miles of road. Between the Rocky Mountains and

the Sierra Nevada, the bonds to be issued are to be double, or \$32,000 per mile. Through mountain and inter-mountain divisions the land patents are to be issued on the completion of every 20 miles of the road. It is provided, however, that not more than fifty thousand bonds (\$50,000,000) are to be issued under any circumstances whatever.

The starting point of the road is to be fixed by the President after survey, on the one hundredth meridian, between the south margin of the valley of the Republican river and the north margin of the valley of the Platte or Nebraska river. This brings it within half a degree of Fort Kearney, between the 40th and 41st parallels of north latitude, and nearly on a due west line of the Burlington & Missouri, south in range of the former projected extension of the Hannibal & St. Joseph Railway. From this point the line is to run west “upon the most direct central and practicable route,” to the western boundary of Nevada territory, there to meet the Central Pacific Railroad Co. of California, a corporation organized under the laws of California, but made a part of the Pacific road by this bill, with the same grants and privileges as are given the eastern section. A grant is also made to the Leavenworth, Pawnee & Western R. R. Co. of Kansas to connect with the Pacific at its starting point on the 100th meridian—provided they complete one hundred miles of road within two years, and 100 miles per year thereafter until the junction is reached. The California Central Pacific Co. are to build fifty miles within two years, and fifty per year thereafter until the whole road is made, when both Companies may come under the provisions of the Pacific Union Act. The Hannibal & St. Joseph and the Pacific R. R. Co. of Missouri, are also granted the privilege of uniting with the Leavenworth, Kansas & Western Co., in building the road from the Mississippi river to the 100th meridian, by obtaining the assent of the State of Kansas.

The bill also provides that whenever a railway is built through Minnesota or Iowa to Sioux City, the Union Pacific Co. are required to build a branch of their road to that point. All other railway Co's are likewise authorized to make connections with the Union Co. upon such conditions as may be prescribed by the President of the United States. These provisions are ample and cover all the rival railway and land interests—real and imaginary—in the west, and will no doubt harmonize all parties in the construction of the great trunk line, which is to be completed before July 1st, 1876, or the grants revert to the government, and the road, fixtures, etc., become forfeited. The Government also reserves the right to fix the rate of freights and passage, whenever the profits of the road exceed ten per cent., provided it shall appear that the rates charged are excessive or oppressive in the judgment of Congress.

In a careful examination of this act, we do

not see but that it is quite as liberal as could be expected, or desired. It seems to us that the grants are ample to secure the construction of the work, while the restrictions are none too severe to prevent its falling into the hands of speculators or landsharks, or becoming too great a monopoly in the hands of avaricious and unprincipled managers. We hope the Company will be speedily organized, by the appointment of the best and most reliable men in the country to the management, and that before the close of the year active measures will be taken for commencing the work.

The effect that the completion of this great line will have upon the roads east of the Missouri can hardly be estimated; but it would be enormous. It is a singular fact, however, that of the present thirty-one million, six hundred thousand inhabitants in the United States, 31 millions live east of the starting point of this road. This distribution of our people would, no doubt, be speedily changed, whenever they can reach the attractive climate of the Pacific, in four or five days travel at a moderate expense. But in any event the building of this road must produce great changes in our social and business relations, and the sooner it is completed the better.

RAILROADS OF PENNSYLVANIA.

The law of the State of Pennsylvania passed April 4, 1859, requires the railroad companies of that State to make their reports annually to the State auditor. This officer then classifies the reports and they are published for the information of the Legislature. When the vast amount of legislation already done, and still needing to be done, for railroad interests is taken into consideration, we think it will be conceded that no class of men need more accurate and reliable information than legislators. Not only should railroad managers in these reports reply to the questions propounded to them, but they should make such suggestions as to legislation as seem to them to be needed for the great interests committed to their charge. It is much to be regretted that in very few instances has this been done, and legislation on these, the greatest interests of the country, has been left almost wholly to the impulses and prejudices of political men, frequently guided by adverse parties in interest. This fact in a measure accounts for the hostility of legislation in regard to this interest. It is to be hoped that a subject of this importance will hereafter receive more attention.

The following are the names of the companies in the State of Pennsylvania to which circulars were sent by the State auditor:

*Allegheny Valley, *Bradford railroad and coal company, *Barclay railroad and coal company, Beaver Meadow, *Chartiers Valley, Cleveland, Painesville and Ashtabula, Cumberland Valley, *Cleveland and Pittsburg,

Catawissa, Chestnut Hill, Chester Valley, Delaware, Lackawanna and Western, Delaware and Hudson canal and railroad company, *Donaldson improvement and railroad company, East Pennsylvania, Erie and North-East, Elmira and Williamsport, *Fayette County, *Franklin, *Gettysburg, *Greenwich improvement and railroad company, Hanover Branch, Hempfield, Harrisburg, Portsmouth, Mt. Joy and Lancaster, Huntingdon and Broad Top Mountain, Lorberry Creek, *Lackawanna *Little Schuylkill, *Lehigh and Susquehanna, Lackawanna and Bloomsburg, Littlestown, Lykens Valley railroad and coal company, *Little Schuylkill navigation and coal company, Lehigh Valley, Mauch Chunk and Summit Hill, Mill Creek and Mine Hill navigation and railroad company, Mount Carbon, M'Cauly Mountain, Mount Carbon and Port Carbon, Mine Hill and Schuylkill Haven, *New York and Erie, *Northern Central *New York and Middle Coal Field, North Lebanon, *North-Western, North Pennsylvanian, Pittsburg, Ft. Wayne and Chicago, Pittsburg and Connells ville, *Pittsburg and Wheeling, *Philadelphia and Baltimore Central, Pennsylvania coal company, *Philadelphia and Sunbury, *Pittsburg, Columbus and Cincinnati, Philadelphia and Reading, *Pittsburg and Steubenville, Pennsylvania, *Philadelphia, Wilmington and Baltimore, Philadelphia and Trenton, Philadelphia, Germantown and Norristown, Quakake, *Swatara, *Strasburg, *Schuylkill and Susquehanna, Summit Branch, Sunbury and Erie, Schuylkill Valley improvement and railroad company, Shamokin Valley and Pottsville, Schuylkill and Dauphin railroad and improvement company, *Trevorton coal and railroad company, Tioga coal and railroad *Wrightsville, York and Gettysburg, *West Chester, West Chester and Philadelphia.

PASSENGER RAILWAYS.

Citizens' Passenger, Philadelphia, Citizens' Passenger Railway, Pittsburg, Delaware County Passenger, Philadelphia, Frankford and Southwark, Philadelphia, *Fairmount, Philadelphia, Fairmount and Arch Street, do Green and Coates, do. *Germantown, do. Girard College, do. *Hestonville, Mantua and Fairmount, do North Philadelphia, do. Philadelphia City, do. *Philadelphia and Darby, do. Philadelphia and Gray's Ferry, do. Pittsburg, Allegheny and Manchester, Pittsburg, Pittsburg and Birmingham, do. Pittsburg and East Liberty, do. *Richmond and Schuylkill, Philadelphia, Ridge Avenue and Manayunk, do. Second and Third Streets, do. Seventeenth and Nineteenth Streets, do. Thirteenth and Fifteenth Streets, do. West Philadelphia, do.

"In laying before the Legislature the reports which have been filed in this office, I am constrained again to express my regret at the failure of so many companies to comply with the law. This dereliction on their part, together with the fact that there are no doubt railroads of more or less importance—generally of lo-

cal interest, or confined almost exclusively to a special line of trade—in operation in some parts of the State, which were unknown to, and, therefore, not addressed by this Department, causes the reports and tabular statements based thereon, now communicated, again to fail in presenting a full and complete view of the railroad operations of the Commonwealth."

The companies marked with a * did not respond to the circular of the auditor, and hence their reports do not appear. Some of them make no reports at all, while others, for example the Philadelphia, Wilmington and Baltimore, make very full reports at a different season from that required by the State.

Of the companies reported the total amount of capital stock authorized for 30 companies is \$83,220,829—for 4 more companies the amount of capital stock is not limited by law, and 3 others do not state the capital stock authorized. The total amount of capital stock paid in to 37 companies is \$84,109,268.83.

The total amount of funded debt of 30 companies at the date of the previous report was \$58,191,881.02, and 7 companies report no funded debt. At the date of the present report the same 31 companies report their funded debt as amounting to \$61,908,749.38. The same 7 companies report no funded debt.

The total floating debt reported at the last report amounted to 6,911,703.85 for 20 companies; 12 companies then reported no floating debt, and 8 companies made no report in this item. In the present report 23 companies report an aggregate floating debt of \$7,165,245.96, 12 companies report no floating debt, and 5 companies make no report on this head. The average rate of interest is reported at about 6½ per cent: one company only pays 10 per cent., one only pays 8 per cent.

The total cost of road and equipment of 34 companies is reported at \$126,713,157.10. The same companies have 2735 miles of road, and 1041 miles of double track and sidings. The average cost of the Pennsylvania railroads per mile of road will thus be seen to be \$46,330. As many of these roads are built over a very difficult country this cost per mile can not be regarded as extravagant, though we have no doubt that it might have been somewhat reduced. In this connection it is worthy of remark, that the amount of stock and bonds somewhat exceeds the amount of cost of construction and equipment of the roads. The difference we presume is due to the discounts upon securities and interest not yet paid out of the earnings of the roads.

The total earnings of the different roads during the year was \$19,975,655.21 or \$7,300 per mile of road. This is rather above the average earnings of the whole country.

The earnings of the Buffalo, New York & Erie Railroad for June were:

1862, ...	\$60,154 13
1861, ...	45,893 11
Increase, ...	\$14,261 02

The interests of the Steubenville Line via Baltimore are well cared for by our friend "the subscriber" Capt. F. D. May. The Captain's long experience in railroading eminently fits him to represent this important line at this point, and his well known urbanity has already made him a favorite there as he is everywhere.

The line from New York to Washington via Philadelphia and Baltimore has for a long time done a very large and satisfactory business. Nearly all the immense military business between New England, New York and the seat of war on the Potomac has passed over this line, and in addition to this there has been a large increase in the ordinary civil business of the roads. Between the 18th of April and 31st of October, there were carried over the Philadelphia, Wilmington & Baltimore R. R. alone, 154,303 troops. And yet this enormous business in addition to the regular business of the road has been done promptly and safely—a high tribute to the skill and energy of the managers of the various lines composing the route.

LOCOMOTIVES IN THE LONDON EXHIBITION.

It is a difficult matter to raise any point of interest in the discussion of locomotives, at least if interest depends upon novelty of subject and freshness of illustration. There are those—many as we believe—to whom the locomotive, as it is, wears perennial attractions, and who do not care to speculate wildly upon its further development.

Professionally, however, our present locomotive practice, although relieved by some variety, has been, on the whole, generally conformed to a common standard. That this is the only one sanctioned by successful experience we deny, but it has answered a good purpose and is not likely to be hastily abandoned. Such differences, too, of structure, as English engines now present have existed for many years, and the arguments for and against outside cylinders, coupled driving wheels, coal burning boilers, counter weighting, feed water heating apparatus, etc., etc., have been well nigh exhausted. This circumstance, however, does not preclude all interest in the comparison of the various locomotives in the Exhibition, those from the Continent at least, being sufficiently novel to satisfy the most revolutionary amateur.

Let us first look at the boilers, several of which have coal burning fire-boxes. That of Mr. McConnell's engine (we had almost said the late Mr. McConnell), has a combustion chamber extending several feet into the barrel, and a longitudinal midfeather completely dividing the firebox and reaching nearly to the tube plate. There are two fire grates, two doors—practically, indeed, two fire-boxes. The plan hardly needs criticism now, for its evils are so well understood that there can be very little danger of its being further reproduced. Messrs Wood and Marshall's experiments proved that the evaporative power of each pound of good coal burnt in this fire-box was but little more than 5 lb. of water; any resident in the neighborhood of Mornington road or Adelaide road has the opportunity, every hour in the day, of witnessing its smoke-emitting capabilities and the boiler

makers at the Wolverton shops know well the weeping habits of the midfeathers, ever lachrymose with percolations of which caulking can not check nor patches dam the flow. A coal-burning firebox should be so constructed, or so fitted with special apparatus, that the gas rising from the fresh coal may be thoroughly mixed with the right quantity of air, and ignited before it reaches the tubes. In the McConnell firebox the gas and air flow in the same direction and unobstructed to the mouths of the tubes, and although the two fires are fed alternately, the communication between the two halves of the combustion chamber is so restricted that an ignitable mixture on one could hardly receive the effect of an igniting temperature on the other.

Mr. Cudworth's firebox, adopted in Messrs. Sharp, Stewart and Co's engine, has a long and steeply inclined grate, and a longitudinal midfeather. The combustion chamber formerly used by Mr. Cudworth has been discontinued. The principle of this firebox is that of gradually distilling the gas at the upper end of the grate, instead of abruptly expelling it from fresh coal thrown upon a mass of incandescent fuel. The great extent of air opening, also, afforded by the long grate admits of the right quantity of air for the combustion of the gas. The two halves or sides of the firebox are fed alternately, through separate doors, opening on each side of the midfeather. The ash pan can be entirely closed against the admission of air, which is regulated by a damper in front and also two doors opening just below the fire doors and under the grate at its highest point. At the lower end of the grate, which, we are told, is 7 ft. 8 in. long, is a chilled plate, 18 in. wide, which may be tipped as a trap door, so as to clear the firebox of any accumulation of clinker. There is provided the usual small jet of high pressure steam, or "blower," to keep down smoke when standing. The whole plan has been extensively used on the South Eastern Railway, where it has given results with which the directors appear to have been satisfied. It by no means effectually prevents smoke, it is costly and heavy in new engines, and the cost of converting ordinary fireboxes to this plan is necessarily great. We occasionally see the advertisements of the South Eastern Company for Welsh coal, and supposing this to be the kind used in the locomotives in question, they should be expected to run without smoking excessively.

The express locomotive from the workshops (at Ivry, near Paris) of the Paris and Orleans Railway Company has, also, a long inclined fire grate, but instead of a longitudinal midfeather, as in the Cudworth firebox, it has one partly dividing the firebox into an upper and a lower portion. Thus the midfeather, or water table, extends, from just below the tubes, backward and upward towards the upper rear angle of the firebox, and the under surface of this midfeather deflects the rising gases into mixture with the air entering at the door. There are two or three vertical tubes connecting the highest points of the midfeather with the water over the crown plate. The plan may be effectual in preventing smoke, but it is objectionable on account of the liability of a nearly horizontal water table to burn out, or, at least, to leak. A slab or arch of fire clay ought, we should say, to accomplish the purpose with less trouble from leaking. The Paris and Orleans engine, it should be said, is indebted for its "*foyer fumivore*" to a M. Tenbrinck. It belongs to the class constructed since the death of the lamented Polonceau, the engineer of

the line, M. Forquenot having since assumed the charge of the locomotive department.

For simplicity we like the plan adopted by Mr. Ramsbottom, in the construction of the firebox of his engine, the Lady of the Lake. Two square openings, which may be opened or closed by dampers, are made through the water space of the firebox just below the mouths of the tubes. The air taken in is deflected backward and upward, into mixture with the gas rising from the coal by an arched mass of firebrick, partly dividing the upper and lower portions of the firebox. In every other respect the firebox is of the common construction where coke is burnt. This simple plan is used with good results in most of Mr. Ramsbottom's engines on the northern division of the London and Northwestern Railway, and now that Mr. McConnell has retired, and Mr. Ramsbottom has taken the post of locomotive superintendent to the whole line, the firebrick arch will doubtless be introduced among the 975 locomotives with which the first railway in the world is now stocked.

Mr. Sinclair's coal burning goods engine, from the eastern Counties Railway, has, we believe, a firebox of the ordinary construction. Mr. Frodshams plan, generally adopted on the Eastern Counties line, consists merely in an air deflecting door, and in the use of a steam pipe within the firebox discharging jets of steam in such a manner as to mix together the gas and air for ignition. As this plan is one the value of which can be tested, at any moment, by shutting off the jets of steam, we do not suppose Mr. Sinclair would have adopted it so extensively as he has done unless there were virtue in it.

We must own that we have not looked into the firebox of the fine express engine designed by Mr. Connor, of the Caledonian Railway, and built by Messrs. Neilson and Co., of Glasgow. But the plan generally adopted by Mr. Connor is that of the fire brick arch, as used by Mr. Ramsbottom, only Mr. Connor does not, we believe, admit air through holes made through the water space, below the tubes, the admission being through the door which is provided with a deflecting plate.

The heavy Belgian goods engine, La Belgique, sent by La Societe Couillet, has a long coal burning firebox, the fire grate being made up of thin wrought iron bars, with distance pieces riveted between them.

The most extraordinary locomotive boiler in the annexe is that, two stories high, of the engine made by E. Gorin and Co., of Paris, for the Northern Railway of France. This is a great tank engine with eight wheels, all coupled, or rather octupled, together. The boiler tubes discharge into a smoke box, from which a separate set of tubes or else a large flue, (for we have not had a look inside) returns, within a large chamber above the boiler, the chimney being placed almost over the head of the engine man on the foot plate behind. We have not obtained the dimensions of this engine, but the cylinders look to be not far from 18 in. in diameter and .24 in. in stroke, and the whole weight ready for work is probably 45 tons. The valve gear is wholly outside of the coupling rods. Upon the wall behind the engine are colored drawings of wonderful engines with similar boilers. One appears to be designed for passenger trains, as it has a pair of large wheels at each end, with six small intermediate carrying wheels. Each pair of large or driving wheels has its pair of outside cylinders, there being four of these in all, or two at each end. Another drawing represents an engine with twelve wheels of equal diameter, six being driven by a pair of outside cylinders at one end the oth-

ers being singularly driven from the other end. We do not perceive that the separate sets of wheels are made to accommodate themselves to curves independently of each other.

To return to the subject of boilers, that of Messrs. Fairbairn and Sons has thick edged plates, and is double riveted, as some of the others may be also. The Italian goods engine has a boiler oval in section, which is not commendable. We may even say the same of the proportions of the whole engine. A considerable number of the English made locomotives have boilers flush from end to end, or without a raised firebox crown. Nearly all the British engines have large steam domes, more commonly placed over the barrel of the boiler at about the middle of its length, although Mr. Sinclair's engine (built by Messrs. Robert Stevenson and Co.), and Mr. Neilson's engines have their domes over the firebox. Messrs. Beyer, Peacock and Co's engine, however, and that by Messrs. Manning, Wardle and Co. have no domes. Such of the engines of the first named firm as have been made without domes carry their steam, we hear "as dry as a bone." It is to be remembered, however, that the boiler of Messrs. Beyer, Peacock and Co's engine in the exhibition is of great size for a 16 in. cylinder, being 4 ft. 2 in. in diameter, and containing 1,332 square feet of heating surface. The draught of steam from a boiler of such great evaporative power would be so slow, comparatively, that it might work dry steam where a smaller boiler would be constantly working water over into the cylinders. Some of the Continental engines have very large domes, that of the Paris and Orleans express engine being of enormous size and over the firebox. The large opening cut for it through the outer crown plate must greatly diminish the strength of the boiler, and if M. Forque not would close this opening altogether and remove the dome, or, rather, make a smaller one 7 ft. or 8 ft. further forward, he would, we have no doubt, discover an advantage in the result. There is no engine in the annexed with two domes, delivering steam from each, an arrangement in great favor in the United States. There is, we believe, no superheating apparatus unless Giffard's Injector be reckoned such.

With respect to general arrangement; out of twenty locomotives, but four of English and two of foreign make have inside cylinders. Most of the outside cylinder engines have only inside or single frames, although Messrs. Neilson and Co's engine has outside journals on the leading and trailing axles, and the two Austrian locomotives, both having outside frames only, cranks being keyed on for driving wheels. At the same time the inside cylinder express engine from Wolverton and the Italian goods engine have only inside framing, and Messrs. Beyer, Peacock and Co's engine has only inside journals for the crank axle, and outside frame furnishing bearings for the leading and trailing axles. Sharp's and Fairbairn's six wheel inside cylinder goods engines have outside and inside frames, the crank axles having four, and the leading and trailing axles two journals. The inside cylinder goods engine by La Societe Couillet has outside framing, while a stout bar extends from the firebox to the smoke box, furnishing a middle bearing for the crank axle.

We may note that the outside cylinder express engine from the Paris and Orleans Railway has adustable wedges on one side of the driving axle journals, and between them. Wedges are thus used also on all American locomotives. Of the engines with

four coupled wheels Mr. Sinclair's, Borsig's and Hartmann's have equalizing or compensating levers between the axles. Sir William Armstrong's has none, nor are compensating levers employed on any of the six wheel coupled engines, although they are introduced, with advantage we do not doubt, between the tender wheels of the engine from Wolverton. Upon the rough and weak permanent way of American lines, compensating levers are reckoned indispensable, and it has been found necessary to apply them to engines sent out from this country to the Canadian railways. They afford a degree of flexibility of which our overloaded permanent way already stand in need. It is becoming common to place from 14 to 15 tons on a single pair of wheels, Messrs. Neilson's engine in the Exhibition having 14 tons 11 cwt. on the driving wheels when loaded. It is undoubtedly the fact that compensating levers, applied, as they have been in Hawthorn's engines between the single driving and smaller leading or trailing wheels, tend to increase slipping, but when applied between coupled wheels there is no increased tendency to slip.

We believe our builders will yet discover the advantages of the truck or bogie, already used to some extent on the Great Western, Bristol and Exeter, North London, Great North of Scotland, and a few other lines. Hartmann's engine in the Exhibition has it in one of its best forms, that devised by Levi Bissell, an American, only that, instead of inclined surfaces on which the front end of the engine should rise when the truck swivels on entering a curve, we find that the bearing surfaces on which the weight is taken by the truck are perfectly flat. It is only with the help of compensating levers and swiveling bogies that American locomotives have a wheel base of from 20 ft. to 23 ft. run safely round curves, where, Captain Galton states in his report on American railways, our ordinary passenger carriages at the same speed would undoubtedly leave the line. On the Canadian railways Mr. McKenzie and Mr. Trevithick of the Grand Trunk, and the late Mr. Brade and the present Mr. Eaton of the Great Western have adopted the bogie, not only in the engines purchased in the States, but also in English engines originally fitted with the ordinary leading wheels. The ease with which the bogie adapts itself to curves is not, however, its only recommendation. It is well known to be an objection to outside cylinder engines, as commonly built, that either a very small leading wheel must be adopted, or it must be set so far back as to take too much weight, or else the cylinders must, for driving wheels of ordinary diameter, be more or less inclined. Unless the cylinders are horizontal we can not expect the outside cylinder engine to gain great favor among engineers. Now with the bogie, the leading wheels may be placed wholly out of the way of the cylinders, and even a larger share than usual of the whole weight of the engine kept upon the driving wheels, and three-tenths more on the trailing wheels with which they are coupled, three-fifths of the whole weight being thus obtained for adhesion. The driving wheels, it should be said, are not placed so far forward as in English engines, and thus although about the same weight is carried upon them, a longer connecting link is obtained. With the four wheel bogie, each pair of its wheels bears but one-fifth of the whole weight of the engine. The two wheel bogie, on Bissell's plan, would probably be preferable on English lines, and let us hope that before 1872, we may see it generally adopted.—*London Engineer.*

RAILROAD COMPANIES' LIEN FOR FREIGHT.

TRANSPORTATION OF COAL—WHAT DELIVERY IS NECESSARY IN ORDER TO DISCHARGE THE CARRIERS' LIEN. WHERE ONE OF SEVERAL CARGOES IS DELIVERED THE LIEN FOR THE WHOLE FREIGHT MAY BE UPON THE REMAINDER.

The plaintiffs were coal dealers in Abington, and had been accustomed to receive coal from Boston over the Old Colony and Fall River Railroad, paying for freight five and a quarter cents a hundred, with a deduction of twenty per cent., in consideration of the unloading of the coal from the cars at Abington, being done by the plaintiffs. Between July 1st and October 7th, 1857, the company transported for the plaintiffs from Boston to Abington five cargoes of coal, but no part of the wharfage at Boston or of the freight had been paid or offered by the plaintiffs to the company.

There were two places upon which the coal was unloaded, both of which were upon the land of the company. One of these was upon the west of their main track, just below the plaintiffs' store, and adjoining the plaintiffs' land, and was a bin made by laying boards upon the ground, so as to make the shoveling out of the coal easier, and planing up one end, the fence between the railroad and the plaintiffs' land forming the back of the bin; and the embankment for the track making the front of the bin. But one kind of coal was put in this enclosure, and by the coal breaking a piece of the back fence, between thirty and forty tons of coal had run over on to the plaintiffs' land. The other bin was on a side track which ran out from the main track on the east side, and was similar to the first and was used to receive other kinds of coal. As the several cargoes arrived in the cars, the plaintiffs and their servants unloaded them into these bins, the cars being left on the main track, or switched off on to the side track for this purpose. From these bins the plaintiffs carried a way coal to deliver to their customers in carts and wagons; half of the first cargo had been carried away before the second arrived; and the plaintiffs continued this course of selling and carrying away till Nov. 1857, when the plaintiffs having failed, the company forbade the plaintiffs from taking any more coal until the freight should be paid, and served upon them a notice "that they claimed a lien on the coal for the freight thereon, and would deliver the coal only upon payment of the freight;" and presented to them a bill for the freight and wharfage. The plaintiffs then brought an action against the company, and replevied the coal.

At the trial, held in the Supreme Court of Massachusetts, the presiding judge ruled that the evidence did not show that the defendants had so far parted with the possession of the coal as to have lost their lien for the freight, and a verdict was taken in favor of the defendants. It was then agreed that if the whole court should be of opinion that, upon the evidence, the plaintiffs could recover, the verdict should be set aside and a new trial ordered; otherwise the case should be sent to an assessor to determine the amount of damages, with such instructions as the court might direct. The following is the opinion of the Appellate Court, sustaining the ruling of the court below, in favor of the defendants.

HOAR, J.—It is true that where there is evidence in a case, upon which it would be competent for a jury to find a verdict for a plaintiff, an instruction by the presiding judge to the jury at the trial, that they ought to return

a verdict for the defendant, would be erroneous. The sufficiency and the preponderance of the evidence are matters wholly within the province of the jury, except upon a motion for a new trial after verdict. But where the facts are undisputed, and the evidence, with all inferences which a jury can rightfully draw from it, does not, as a matter of law, have any tendency to establish a proposition which is essential to the maintenance of the plaintiffs' case, it is the duty of the judge so to instruct the jury. In this case, the defendants having received upon their wharf, and transported over their railroad the plaintiffs' coal, had a lien upon it for wharfage and carriage. Their right to retain it for their lien was indisputable, unless they had lost the lien by parting with the possession of the coal. The plaintiffs, to maintain their action of replevin, must show that they were entitled to the possession. To establish this, it was incumbent on them to prove a complete delivery of the coal, sufficient in law to terminate the carriers' lien. This was the fact which the jury must find upon competent evidence, or their verdict must be for the defendants. The jury, at the trial, were instructed that this fact was not proved; and the whole court are of that opinion. The evidence submitted to the jury was the testimony of a single witness, with certain admissions of the parties. There was no evidence that the plaintiffs had paid or tendered any part of the money due to the defendants, or were ready or offered to pay it, before they replevied the coal; nor of any agreement to give credit for it; nor that enough of each cargo did not remain to be ample security for the freight due upon that particular parcel. The plaintiffs, by the agreement of the parties, were to perform the labor of unloading the coal from the cars; but this being done upon the premises of the defendants did not divest the possession. The jury had no evidence of any lease of the bins to the plaintiffs. There was nothing to show that the defendants might not have used the bins for any other coal, or required the plaintiffs to unload the coal at some other place, at their pleasure. It was then material to consider what delivery of the coal would be effectual to determine the lien.

By the contract, no credit for the freight being stipulated, the delivery of the coal by the defendants, and the payment of the freight by the plaintiffs, were acts to be done at the same time. A delivery may be complete for one purpose and not for another. The cases cited by the plaintiffs' counsel to show what constitutes a complete delivery are all cases which decide either what delivery is sufficient to pass the property as between vendor and vendee, or what is sufficient to terminate the liability of a carrier. A delivery may be complete so far as either of those purposes is concerned, and yet be upon an implied condition as to payments; and upon failure to perform this condition, the right of possession of the party making the delivery will remain unimpaired. This is a familiar doctrine as between vendor and vendee. If a man purchases goods at a shop for cash, and they are handed to him, or put by the shopkeeper into his wagon, and he then refuses to pay for them, no doubt they may be taken back.

The same principle applies to the lien of a carrier. The right of a carrier to payment for the carriage first exists when he has performed the contract on his part; and this lien would not be lost, were the delivery even much more unequivocal than that on which the plaintiffs here rely. Suppose the railroad company should allow a customer for whom they had brought a lot of flour, to unload it

from the cars on to his wagon, and, as he started with the load, should demand the freight, could it be supposed that they would have no right to retake the flour, if he should refuse to pay? But suppose, instead of one load, there should be a hundred barrels, and the first load should be allowed to go without payment, the rest being taken from the cars and put upon the platform in the freight house, the company knowing that enough was left to make them secure, and the demand should be made as the owner was about removing the last load, could this destroy the right to retain for the lien? Where two acts are to be done simultaneously, under a contract, the obligation to do each is dependent upon the performance of the other, and each is done upon the implied condition that the other shall be done likewise. The plaintiffs in the absence of express agreement or regulation might say that they would not pay their money until they received their goods; and the defendants that they would not deliver the goods until they received their money. If the goods were, as in this case, not capable of instantaneous delivery, it would be impossible to perform the contract unless one or the other should begin. And we think the one who begins loses none of his rights by so doing, in the absence of evidence that he has agreed to waive them.

As there was nothing in the case to show that enough of each cargo was not left to satisfy the lien for the freight of that cargo, and as the plaintiffs made no demand of any separate portion of the coal, and proved no readiness to pay any freight whatever no question seems to arise as to the extent of the defendants' lien. But we think it clear for various reasons, that they had a lien on the whole, for the whole sum claimed. Although the different cargoes which were carried were perhaps at first so far distinct subjects of contract, that the defendants might have delivered and demanded the freight for one, before delivering another, and the plaintiffs might have demanded one without waiting for the arrival of the whole, yet we think the mingling them together indiscriminately, in the bins, shows that the whole was regarded by the parties as a continuous carriage and delivery of an entire quantity. But if this were not so, and the defendants had a separate lien upon each cargo for its freight and wharfage, then, as the plaintiffs mingled the several parcels so that they could not be distinguished, they must be held to have extended the lien upon each to the whole quantity remaining. This principle is well settled in regard to two persons having the general ownership of two parcels of similar goods; and it seems equally applicable to a case where one of them has a special property.

According to the agreement at the trial, the case is to be sent to an assessor, with directions to assess as damages the whole sum due for freight and wharfage, with interest from the date of the writ, unless that agreement is now changed by the parties.—*American R. R. Journal*.

MICHIGAN CENTRAL RAILROAD.—At the stockholders' meeting of this company, recently held in Detroit, for appointing officers for the ensuing year, the following were elected:

Directors.—J. W. Brooks, Nathaniel Thayer, R. B. Forbes, H. Hunnewell, J. N. Forbes, Elton Farnsworth, Erastus Corning, L. D. Williamson, George F. Talman.

The board of Directors at a subsequent meeting re-elected the old officers, as follows:

President, J. W. Brooks; Vice President, H. H. Hunnewell; Treasurer, Isaac Livermore; General Superintendent, R. N. Rice; Assistant Superintendent, O. H. Hurd; Local Treasurer, Oliver Macy; Cashier, George W. Gilbert; Auditor, J. Newell; Freight Agent, John Hosmer.

COMPRESSED COAL.

The value and importance of an invention which can profitably utilize that great proportion of this our great staple product that is now entirely lost, was adverted to in last week's Journal. It was there shown, upon the authority of Mr. Alex. Bassett, that 40 per cent. at least was never even brought to surface, as, according to present arrangements, it would not pay for raising. The question of the compression of coal has engaged the attention of mechanical and scientific men for many years, the great difficulty having been to bring about the desired result without the admixture of extraneous cohesive matter. By the amalgamation of several inventions, the patent rights of which have been purchased by the company now before the public, this coveted goal appears to have been reached, it being stated that the smallest coal can be compressed into blocks which occupy one third less space than ordinary coal, taking but 31 cubic feet to the ton, while raw coal averages from 44 to 48 feet. The process by which these compressed blocks are obtained is inexpensive, and without complication. In the first place, the pure coal-dust, or slack, is conveyed through a washing machine, for the purpose of disconnecting it from any stony particles it may contain. It is then subjected to a steady heat, until its bituminous parts are rendered quite soft, after which it is passed into a moulding machine. This comprises a rotary table containing the moulds, around which are situated three presses—namely, the feeder for filling the moulds; the main press for condensing the block; and the discharger, which removes the block out of the mould, whence it falls into a traveling web, which carries it away. The press acts simultaneously, and between each stroke the table makes one third of a revolution, by which the coal is removed from one press to the other. An apparatus is provided for extracting the gases from the coal during pressure, ingeniously opening out the air passages at each stroke, which would otherwise become choked by the bitumen. In these presses, necessarily of a very powerful description, breakages would be always occurring, but for a provision which has been made by the fulcrum of the levers of the main press, the safety-valve of which is only loaded to the extent that the strength of the machine will bear. Each machine, which is inexpensive in construction, is capable, it is calculated, of making 28 tons per day, at an estimated cost of 2s. per ton. From having during the process of washing the stony parts removed, and from the lighter gases which produce smoke being driven off during the manufacture, it is said that steam vessels provided with these blocks of compressed coal will carry fuel for steaming nearly double the number of days; and, moreover, that this fuel is free from the danger of spontaneous combustion. For domestic and manufacturing purposes it is cheaper and cleaner than raw coal. We understand that the company has met with a most favorable reception from the public, and that active operations will be forthwith commenced.—*Lond. Min. Jour.*

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N. Y. & Pa.		48	\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.	65	380	13,111,800	10,781,833	566,070	3,922,203	2,305,788	Sept. 30, 1880	Maryland Sterling Mortgage.....	3,000,000	5			
do do										" " " " " "	2,500,000	6	88	1885	
do do										" " " " " "	700,000	6	84	1880	
do do										" " " " " "	1,124,300	6	90	1875	
do Washington Branch.....	Md.		30	1,650,000						" " " " " "	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind		118	1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7	55	1866	
do do										2d " " " " " "	160,000	7		1870	
Buffalo and State Line.....	N. Y. & Pa.	122	68	1,950,950	1,049,000	27,543	911,019	493,047	June 30, 1880						
do do															
Burlington and Missouri.....	Mo.		75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	132	93	3,98,400	8,880,000		1,997,065	733,950	Dec. 31, 1880	1st Mortgage.....	3,700,000	6	100	1864	
Central Ohio.....	Ohio.		137	In hands of Receiver.	3,673,000	1,126,438	597,633	71,350	Aug. 1, 1859	1st Mortgage.....	450,000	7	62	1861	
do do										2d " " " " " "	700,000	7	60	1864	
do do										1st " " " " " "	80,000	7	84	1865	
do do										3d " " " " " "	850,000	7		1865	
do do										4th " " " " " "	1,365,200	7		1876	
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1880.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d " " " " " "	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.		222	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1880.	1st Mortgage.....	2,000,000	7			
do do										2d " " " " " "	1,535,000	7			
do do										3d " " " " " "	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d " " " " " "	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		194	2,897,750	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	80	Feb & Aug 1	
do do										2d " " " " " "	3,600,000	7	48	Feb. & Aug 1	
do do										2d " " " " " "	2,000,000	6	36	May 1.	
Chicago and Rock Island.....	Ills.	53	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	103	1870	
Chicago, Burlington and Quincy.....	"	76	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	102	1873	
do do										2d " " " " " "	813,000	8	104	1890	
do do										1st Mor. Chi. & Aur.	390,000	7		1867	
do do										2d " " " " " "	303,000	7		1869	
do do										1st "Cent. Mil. Tract	390,000	7		1864	
do do										2d " " " " " "	215,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	99	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d " " " " " "	950,000	7	100	1880	
Cincinnati Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d " " " " " "	532,000				
do do										3d " " " " " "	104,000				
do do										Income.....	305,509				
Cleveland and Mahoning	Ohio.	68		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d " " " " " "	400,000	7			
do do										3d " " " " " "	344,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	21	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7		1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7	91	1873	
do do										3d 2d Ex.....	1,165,000	7	80	1885	
do do										4th 3d Ex.....	1,154,000	7	64		
Cleveland and Toledo.....	Ohio.	47	143	3,343,800	3,850,670	196,413	919,971	403,956	May 31, 1861.	1st Mor. Jun. 1st Div.	339,000	7	65	1867	
do do										1st " " " " " "	263,000	7		1872	
do do										2d " " " " " "	265,000	7		1862	
do do										1st " Tol. Nor. & Clev	521,000	7	75	1863	
do do										2d " " " " " "	293,300	7	75	1864	
do do										Junction Income..	44,500	7		1862	
do do										C. & T. Income...	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	123	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	125	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	99	1861	
do do										2d " " " " " "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	105	54	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700		92	1860 & 1866	
Columbus, Piqua and Indiana.....	"		103	In hands of Receiver.	1,219,100		292,267	375,002							
Dayton and Michigan.....	"		142	2,176,668	2,512,000										
do do															
Dayton and Western.....	Ohio.		38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	50		
Detroit and Milwaukee.....	Mich.		186	No report						1st Mortgage.....	2,500,000	7		1875	
do do										2d " " " " " "	1,000,000	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.		111	No report											
Dubuque, Marion and Western.....	"		51	No report											
Eaton and Hamilton.....	Ohio.		36	469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.		132	986,061	1,219,100	249,868	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d " " " " " "	180,000				
Galena and Chicago Union.....	Ills.	72	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000		103	1862 & 1863	
do do										2d " " " " " "	1,520,000		100	May 1, 1875	
Great Western	Ills.		175	1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " " " " " "	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.		84	400,000	No report										
Greenville and Miami.....	Ohio.		32	300,000	473,000	75,000	63,141	13,573							
Hannibal and St. Joseph.....	Mo.	206		1,041,000	10,554,000	220,306	996,907	512,933	Sept. 1, 1860.	Land mortgage...	5,000,000				
do do										Mortgage Conv.....	1,354,000				
Hartford and New Haven.....	Conn.		62	2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	927,000	6	99	1873	
Hudson River.....	N. Y.	45	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	108	1869 & 1870	
do do										2d " " " " " "	2,000,000	7		1870	
do do										3d " " " " " "	1,840,000	7		1875	
Illinois Central.....	Ills.	63	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000	7	64	1868	
do do										Construction.....	12,885,000	7	92	1875	
do do										" " " " " "	4,115,000	6	96	1875	
do do										Debentures.....	42,740	7			
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000	7			
do do										2d " " " " " "	578,000	10			
do do										Income.....	38,700	10			
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000	7	85	1866	
do do										2d " " " " " "	400,000	7			
do do										Real Estate Mort...	200,000	7	85		
Indianapolis Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	1st Mortgage.....	649,984	7	62		
do do										2d " " " " " "	314,000				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report								
Iron.....	Ohio.		13	118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of line in miles.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quot. of Bond.	Due.	When Payable.
Iron Mountain.....	Mo.	86 1/2		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 275,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st ".....	2,99,000	7	75	1861	
do										2d ".....	392,000	7	70	1873	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,632	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st ".....	250,000	7			
do										2d ".....	1,000,000	7			
do										3d ".....	600,000	7			
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	90,000		80		
do										2d ".....	1,000,000				
do										1st Mortgage E. D.	1,000,000				
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Land Grant W D	4,000,000		21		
Lexington and Frankfort.....	Ky.	29		514,433	130,000		10,914	43,267	June 30, 1861	1st Mortgage.....	130,000	6			
Little Miami.....	Ohio.	65					1,330,050	529,981	Jan. 1, 1862	1st Mortgage.....	1,300,000	6		1863	
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		245,910	98,679	June 30, 1861	City Loan.....	174,000				
do										1st Mortgage.....	245,000				
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st ".....	2,400,000	7			
do										1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,827	371,402							
do															
do															
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,503	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.	205		8,561,213	190,408	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1863	
do										2d ".....	2,000,000	7			
do										3d ".....	1,500,000	7			
do										Sterling Income.....	333,000	4			
do										Domesic.....	928,617	6			
Michigan Central.....	Mich.	59	224	6,057,724	7,968,429	125,000	2,126,699	910,169	May 31, 1861	1st Mortgage.....	457,483	6	98 1/2	1872	
do										1st ".....	500,000	8	84	1869	
do										1st ".....	250,000	8	96	1860	
do										1st ".....	2,500,000	8	104 1/2	1869	
do										1st ".....	2,500,000	8	106 1/2	1862	
Michigan South'n & North'n Indiana	Mich &	24 1/2	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. S. J.	991,000	10	99	1860	
do										" Nor. Ind.	985,000	10	103	1861	
do										" Goshen Line.	1,168,000	10	100	1868	
do										S. F Toledo.....	2,850,000		4 1/2	1865	
do										1st Mortgage.....	2,465,000	8		1877	
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8			
do										2d ".....	20,000	8			
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8			
do										2d ".....	600,000	8			
Milwaukee and Prairie du Chien.....	Wis.	27 1/2	192	4,944,000	2,556,000		583,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	93	1891	
do															
do															
Mississippi and Missouri.....	Iowa,	35		No report						1st Mortgage Conv.	1,000,000	7			
do										2d ".....	400,000	8			
do										Oskaloosa Div.	1,425,000	7			
do										Land Grant.....	7,000,000	7	102 1/2		
New Jersey.....	N. J.	13	34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000				
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.						
New York and Erie Pref.....	N. Y.	62		Sold under mortgage			5,590,916	1,979,400	Sept. 30, 1860.	1st Mortgage.....	3,000,000	6	104		
do										2d ".....	4,000,000	9	99		
do										3d ".....	6,000,000	16			
do										4th ".....	4,900,000	88 1/2			
do										5th ".....	1,792,307	102 1/2			
New York and Harlem Prof.....	Conn.	44	138	5,717,190	6,055,752		1,142,251	433,716	Sept. 30, 1860.	1st Mortgage.....	2,950,000	7	101	1873	
do										2d ".....	1,000,000	7	101	1864	
New York and New Haven.....	Conn.	15		3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	7	94	Dec. 1, 1866	
do															
New York Central.....	N. Y.	90	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,925,000	6	101	Oct. 1, 1875	
do										Mortgage.....	3,000,000	7	106 1/2	May 1, 1884	
Northern Central.....	Md.	138		2,260,000	5,890,300	537,995	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,065,500	6		June 15, 1864	
North Missouri.....	Mo.			2,423,730	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,500,000	6		1885	
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500				
do										2d ".....	316,945				
do										Construction.....	4,637,920				
do										Income.....	3,591,183				
Ohio and Mississippi, Western Div....	Ills.	148			3,292,403		No report			State Loan.....	7,000,000	6			
Pacific.....	Mo.			3,199,662	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	" S. W.	2,800,000	6			
do										Construction.....	4,500,000	6	104 1/2	1888	
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,905,000	6	98 1/2	1875	
do										2d ".....	2,319,000	6			
do										3d ".....	1,937,440	5	89	1875	
do										State Works.....	7,200,000	5			
Peru and Indianapolis.....	Ind.	74		1,100,090	820,000	80,000	No report			1st Mortgage.....	2,300,000	6	99 1/2	1894	
Philadelphia, Wil. and Baltimore....	Del.	98		5,600,000	2,340,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	1st Mort. O. & P..	1,000,000	7	78	1865	
do										2d ".....	730,000	7		1866	
do										1st " O. & I.	1,000,000	7		1872	
do										2d ".....	380,000	7		1873	
Pittsburgh and Connellsville.....	Pa.	49		1,755,896	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000	7			
Racine and Mississippi.....	Wis.	104		2,705,740	1,417,900	1,085,328	220,850	68,438	May 10, 1861.						
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856	
do										".....	997,000	7		1866	
do										".....	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1866	
do															
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		40,975	500,000	100,000	110,200			1st Mortgage.....	500,000	7			
do										2d ".....	450,000	7			
do										1st Mortgage.....	1,500,000	7		1870	
do										2d ".....	900,000	7		1865	
do										1st Mortgage Conv.	1,000,000	7	110	1862	
do										2d ".....	2,000,000	7	80	1868 & 1870	
do										1st " Bel. & Ill.	517,000	7	91	1873	
do										1st Mortgage.....	230,000	7	91	1860	
do										1st Mortgage.....	3,400,000	7	59	Aug. 1, 1865	
do										2d ".....	2,500,000	7		Nov. 1, 1878	
do										Mort. Coupons....	98,049	7		1860 to 1865	

IRON TRADE MEETING.

A meeting of the iron manufacturers and dealers of this and other States was held yesterday at the rooms of the Board of Trade. Mr. John Welsh was called to the chair, and Mr. Charles Wheeler chosen secretary. The Chairman announced that the meeting assembled under the following call from Morris, Tasker & Co., Thomas J. Potts, McCullough & Co., and other representatives of the iron manufacturing interest, dated July 8th, 1862:

"Referring to circular of 5th ultimo, having for its object a reduction of credits from six to four months, it has been decided to call a meeting of those interested in the iron business, to be held at the rooms of the Philadelphia Board of Trade, No. 505 Chesnut street, on Tuesday next, July 15th, 1862, at 12 o'clock noon, to which you are respectfully invited.

"We trust you will see the importance of this movement and strengthen it by your presence. Should you, however, be unable to attend, we request that you communicate your views to either of the undersigned by letter, which may be used at said meeting."

The Chairman remarked that the object of the meeting was to try to get the trade unanimously to consent to a reduction of credits from six months, as has been the rule heretofore, to four months. The object is so apparent, and so evidently for the general good, that there could be no necessity for saving much to enforce it. This circular was addressed to a great many parties, some of whom are here, others have forwarded communications, which, if the meeting desire, will be read.

About seventy-five communications were received, the largest portion of which were read by the Secretary. The following is a list of parties from whom replies were received, all in favor of the views expressed in the call for the meeting:

FURNACES.

E. & G. Brooke, Hampton Furnace, Birdsboro, Pa.
 Bloomsburg Iron Company, Bloomsburg, Pa.
 Carbon Iron Company, Perryville, Pa.
 G. Dawson Coleman, Lebanon Furnace, Pa.
 Clingan & Buckley, Hopewell, " "
 Eckert & Co., Henry Clay Furnace, Reading, Pa.
 Eagle, Beaver & Co., Eagle Furnace, Marietta, Pa.
 Fuller, Lord & Co., Boonton, N. J.
 Grove Bros., Columbia Furnaces, Pa.
 D. O. & H. S. Hittner, Wm. Penn. Furnaces, Pa.
 F. S. Hunter & Bro., Moslem, " "
 C. C. Alger, Hudson Iron Works, N. Y.
 John Irwin Jr. & Co., Howard Iron Works, Pa.
 Lehigh Crane Iron Company, Catasauqua, Pa.
 B. S. Le Van, Lehigh Valley Iron Works, Pa.
 Leesport Iron Company, Leesport, Pa.
 McKelvy & Neal, Bloom Furnace, Pa.
 Musselman & Watts, Marietta Furnace, Pa.
 Swede Iron Co., Conshohocken Furnace, Pa.
 White, Ferguson & Co., Robeson, Pa.
 Jos. Whitaker & Co., Durham Iron Works, Pa.
 Chas. Frederick Raun, Peekskill Blast Furnace, N. Y.
 J. B. Moorhead, Merico Furnace, Pa.
 Atkins & Bro., Pioneer Furnace, Pottsville, Pa.

ROLLING MILLS.

H. Abbott & Son, Canton Rolling Mills, Baltimore.
 Allentown Rolling Mill Co., Allentown, Pa.
 Charles L. Bailey & Bro., Central Rolling Mill, Harrisburg.
 Horace A. Beale, Thorndale Iron Works, Chester county, Pa.
 Bay State Iron Company, Boston, Mass.
 Edward S. Buckley, Gray's Ferry Mills, Pa.

E. & G. Brooke, Rolling Mills and Nail Works, Pa.
 H. N. Burroughs, Portage Iron Works.
 O. W. Barnes, Fountain Green Rolling Mill.
 Cumberland Nail & Iron Co., Bridgeton, N. J.
 Camden Rolling Mill Company, N. J.
 Duncannon Iron Company, Pa.
 Richard Borden, Agent, Fall River Iron Works, Mass.
 Fuller, Lord & Co., Boonton Rolling Mill, N. J.
 H. P. Gibbons, Wilmington Rolling Mill, Del.
 James Hooen, Norristown, Pa.
 Huston & Penrose, Lukens' Rolling Mill, Pa.
 Samuel Hatfield, West Brandywine Rolling Mill, Pa.
 Haywood & Co., Palo Alto Rolling Mill.
 Hancock & Foley, Rough and Ready Rolling Mill, Danville, Pa.
 Heylman & Co., Crescent Iron Works, Pa.
 John Irwin, Jr., & Co., Howard Iron Works, Pa.
 McCullough, Northeast, Shannon and Octoraro Mills, Del.
 McDaniel, Adams & Co., Diamond State Rolling Mill, Del.
 Morris, Tasker & Co., Pascal and Fairmount Iron Works, Philada.
 Wm. McIlwain & Sons, Reading, Pa.
 Hughes & Co., Mont Alto Mills, Pa.
 McHose, Eckert & Co., Reading, Pa.
 C. & E. Pennock, Valley Iron Works, Pa.
 Qumsigamond Iron Works, Worcester, Mass.
 Phoenix Iron Company, Philadelphia.
 A. & P. Roberts & Co., Pencoyd Iron Works, Philadelphia.
 Seyfert, McManus & Co., Reading, Pa.
 Hugh E. Steele, Laurel Rolling Mill, Pa.
 Steele & Worth, Viaduct Iron Works, Pa.
 Trenton Iron Company, Trenton, N. J.
 David Reeves & Son, Safe Harbor Iron Works, Pa.
 Trego, Thompson & Co., Baltimore Rolling Mill.
 E. Yardley & Son, Pottsville Rolling Mill.
 Wm. E. Coffin & Co., Pembroke Iron and Forge Company, Boston.
 Park, Smith & Co., Elk Rolling Mill, Elkton, Md.
 Sanborn, Richardson & Co., Boston, Mass.
 Craige & Kock, Keystone Iron Works, Reading, Pa.

DEALERS, FOUNDERS, &c.

Cabeen & Co., Philadelphia.
 E. J. Etting & Bro., " "
 Morris, Wheeler & Co., Philadelphia.
 Naylor & Co., New York, " and Boston.
 Nathan, Trotter & Co., " "
 Robert Taylor & Co., " "
 Kemble & Warner, New York.
 Samuel & William Welsh, Philadelphia.

Mr. Hugh E. Steel then offered the following preamble and resolutions, which, after the addition of the fourth resolution, as proposed by Mr. Samuel J. Reeves read as follows:

Whereas, a reform in the credit system of the iron trade is desirable for the interest of the consumer as well as of the manufacturer and dealer; and whereas, concert of action is necessary to consummate the same, it is therefore resolved,

First, That the credits on sales on and after the first of August, 1862, be reduced to four months.

Second, That sales for cash should in all cases be held to imply a settlement within ten days.

Third, That the discount for cash should not exceed four per cent.

Fourth, That settlements of bills, whether by cash or note, shall be made in currency equal in value to the United States legal tender notes.

Fifth, The foregoing resolutions are recommended by this meeting as a rule of action

for the iron trade, and the individuals and firms consenting thereto pledge themselves that they will give these resolutions their united and hearty support.

Sixth, That the proceedings of the meeting be published, and copies sent to all members of the trade.

These resolutions were fully discussed and unanimously adopted.

Mr. Reeves offered the following resolution:

Resolved, That we recommend the trade to establish the uniform custom of adding the excise at the foot of the bill of sale, and that when quotations of price are made, it shall be understood that the tax be an additional charge.

The Chairman remarked in reference to this resolution, that he thought it ought not to be adopted. It would appear to be setting a bad example to a large community of manufacturers, most of whom would immediately follow in our steps. Every manufacturer of every description would take this action as his guide, and from the smallest article up to the largest the price would be quoted irrespective of the tax, and every account would be rendered with the tax separately stated. The true principle is to look upon the tax as a part of the cost of production, and estimate it in that way. We had better look upon it as a part of the production in all instances. It is a tax upon profits, upon manufactures, and it would be rendered odious if distinguished as the resolution proposes. The chairman thought none of the gentlemen in the trade would, under any circumstances, take a position likely to embarrass the government, or to render its claims on us in the way of taxation in the least degree distasteful. All should concur in efforts to show that these taxes are cheerfully paid.

Mr. Reeves disclaimed any idea of rendering taxation odious, and if such a result could by any possibility follow the adoption of his proposition he would withdraw it. As their seemed to be some opposition to the views expressed in his resolution, he withdrew it.

After making provision for paying the expenses incurred, the meeting adjourned.—*Phil. N. American and U. S. Gazette.*

SCALE IN BOILERS.—The apparatus of M. Schau consists of a cylinder closed on top and connected with the boiler by a short tube. Into this cylinder the feed water is thrown in a shower, so that the heat of the steam brings it instantaneously to the boiling temperature before it reaches the boiler. This rise of temperature precipitates the solid matters which are deposited in the cylinder, while the water in a purified state goes to the boiler. An Austrian locomotive provided with this apparatus ran over 5,500 miles (8,880 kilom.); during which about 45 lbs. of a soft material like soap was deposited in the cylinder, while the boiler was kept perfectly clean. This result is the more remarkable, since at the beginning of the experiment it was coated, to a thickness of three-tenths of an inch, with a solid crust, which completely disappeared during the experiment.

M. Engerth, State-Counsellor, who presided at the meeting of Austrian Engineers, to which the above was communicated, remarked that it was probably his experiments on locomotives which suggested to M. Schau the first idea of his simple and ingenious apparatus. It is known in fact that when the feed water returns to the tender after being strongly heated, there is formed in that reservoir a considerable deposit, whilst the boiler itself is comparatively free.—*Zeitschrift der Oesterreichischen Ingenieur-vereins.*

It was rumored semi-officially, some days since, that the Galena road would pass its August dividend. We have reason to think that if such an intention was entertained, that it has been abandoned, and that the probabilities are that a dividend of 3 ¢ cent. will be declared. The earnings have been recently larger than was anticipated. The money for the dividend is in bank, and parties stand ready to renew the bonds, \$160,000 falling due in August. If the dividend is deferred to January, it will be subject to the new tax law, and this 3 ¢ cent. will be saved if the earnings are divided at once.

SALTING OF BRICK-WORK.—The question was asked some time since in your paper, whether any means could be adopted to prevent the salting of brick-work. In a building to which I was architect last year, we tried, by the advice of a chemist, oiling the facing bricks with linseed oil. The oil was applied with a brush to one face and one end of each brick; and, as no salting has appeared on any part of the brick-work, which was finished about twelve months ago, the experiment seems to have been in this case successful.

I have found the same kind of facing-bricks become salted considerably where they have been used without oiling; and, from the appearance of the mortar joints in the case in question, think that the same would have occurred in the present instance, had the oiling not been adopted.

The salting of brick-work is so detrimental to its appearance, that any means of preventing it is of value; and I therefore send you the result of my own experience on the subject. The oiling rather improves than otherwise the color of the brick.—*London Builder.*

The earnings of the Chicago & Northwestern Railroad for June were:

1862.....	\$104,382
1861.....	83,229
Increase.....	\$21,153

The earnings of the Chicago, Burlington & Quincy Railroad for the month of June were:

1862.....	\$225,081 77
1861.....	119,186 51
Increase.....	\$75,895 23

The approximate earnings of the Pittsburgh, Fort Wayne & Chicago Railway Company during the month of June ult., compared with the same period of last year, were as follows:

	1862.	1861.
From Freights.....	\$163,768 43	\$124,166 35
Passengers.....	72,410 96	58,834 33
Express matter.....	2,300 00	2,500 00
Mails.....	7,225 00	7,225 00
Rent of Railway.....	7,083 33	7,083 33
Rents.....	34 50	.....
Miscellaneous.....	463 50	369 36
Total.....	\$230,078 10	\$204,778 37
Earnings from Jan. 1 to May 31.....	\$1,423,173 34	1,171,634 11

Total earnings for June 30, \$1,683,25 44 \$1,376,421 48
Increase for June, 27 per cent.; average increase to June 30, 22 1/2 per cent.

The estimated earnings of the Toledo and Wabash Railroad for the month of June are as follows:

1862.....	\$113,577 66
1861.....	79,073 88
Increase.....	\$34,503 78

The earnings by the Chicago, Burlington and Quincy Railroad for the first week in July were:

1862.....	\$53,096 65
1861.....	31,425 40
Increase.....	\$21,671 16

MONETARY AND COMMERCIAL.

The great features of the week have been the high price of gold and silver, and the distrust and almost panic created by the recent raid of Morgan band of Guerrillas into Kentucky. Gold and silver so far from receding from the high prices quoted in our last have increased in value, and gold to-day is quoted at 19 to 20 selling rate and 17 to 18 buying, while silver ranges from 9 to 10 buying and 11 to 12 selling. Eastern exchange at the same time is 1/2 discount to par buying and par to 1/2 premium selling; Eastern bank notes are at a discount of 1/4 to 3/4 per cent. In ordinary seasons the price of gold sympathizes with the price of exchange on the great Eastern cities, but to-day, gold is worth more in New York than it is in Cincinnati. It is very evident from this that the high price of the precious metals does not arise from any overtrading on the part of the West with the East, but from some cause which effects the eastern market exclusively. That cause is very easily found in the extensive sales of Government securities in New York, chiefly on foreign account, and which are principally remitted for in gold and silver—the ordinary commercial balance being entirely inadequate to the sudden and unprecedented demand for exchange on London and Paris. Without stopping to discuss the reasonableness of the panic that has apparently seized foreign holders of our securities, it is very evident that the apparent success attending the rebel arms, in the battles before Richmond, have caused a large amount of Government and city railroad securities to be thrown on the market at once and as a natural consequence prices must fall, for securities, and rise for the international circulating medium. It is also altogether probable that European capitalists begin to think there is more danger of foreign intervention and possibly of foreign war than heretofore. That England and France desire to interfere, we think there can be no reasonable doubt, and we think it is generally clear that the recent series of struggles resulting in the change of base of operations for the army of the Potomac, resulting as they did invariably in favor of the national arms, can give no reasonable hope of Rebel success, while they may be distorted by diplomatic agents into a plausible excuse for intervention. Whatever may be the motives or views of the foreign holders of securities, one thing is quite certain, they are rushing them home upon us quite rapidly, selling at any price they can get and paying any premium that is demanded for coin in payment. That they will eventually be the losers we have no question. For certainly a government based upon the united will of twenty millions of freemen, though it be assailed by a minority of those favoring an aristocracy, must be stronger to-day, even in civil convulsion, than a European Empire based upon the will and shrewdness of a single individual.

But there is a lesson which our Government should learn in the present aspect of the finan-

ces of the country. Even we can not afford to tamper with our opportunities. Had the army of the Potomac followed the brilliant examples of the armies of the West, and fought the enemy in field instead of endeavoring to fight the pestilence of the marshes, the Rebel army would to-day, in all human probability, have been either totally annihilated or driven far to the south of its present position. Our national credit would have still stood on the high pinnacle where the glorious victories of the West placed it, and our national securities would have been sought instead of shunned. On our government rests the responsibility not only of crushing the rebellion, but of sustaining the proud fabric of the national credit. Every wave which crosses the broad Atlantic but reflects back, in a magnified and sometimes distorted manner it is true, but still reflects back, the events that occur here. Are the national arms successful—then we hear from abroad that they have always thought the resources and energy of the northern States invincible. Do we meet with reverses—all Europe resounds with the cry of unnatural warfare. In the midst of success our securities go up to 105 or 108, and in apparent adversity they sink only to 98 it is true—but gold goes up to 120.

It is earnestly to be hoped that the Government will hereafter carry on this war with adequate means and in a prompt and martial manner. Let it be war—and let the policy be to forage upon the enemy—let it no longer be safer at the seat of the contest to be a rebel than a loyalist, and let our generals strike when and where they can, rapidly, promptly and vigorously.

General business is rather better than an average for the season. The demand for money is however light, business houses rather preferring to confine their operations to actual capital employed, than to run large risks even with great temptations. Money is therefore abundant and cheap, for good parties, while loans are absolutely impossible for those of doubtful character.

We notice this week the advent of a new firm in the banking business, under the style of Espy, Heidelberg & Co. Mr. Espy has for many years been a leading member of the House of Kinney, Espy & Co., from which firm he now withdraws to become the senior partner of the new house. His associates are Messrs. Phillip Heidelberg, Jacob Seasongood, M. Heidelberg and Louis Heidelberg—all gentlemen of wealth and business experience.

In groceries we notice a fair business and prices well sustained. In produce there is not much doing, but prices are firm. The crops so far look promising, and if present expectations are realized, we can not only feed our armies and people, but spare a large share for Europe which she will unquestionably need.

The following are the quotations for exchange and coin.

	BUYING.	SELLING.
New York.....	1/2 dis.	par @ 1/2 prem.
Boston.....	1/2 dis.	par @ 1/2 prem.
Philadelphia.....	1/2 dis.	par @ 1/2 prem.
Baltimore.....	1/2 dis.	par @ 1/2 prem.
Gold.....	20 prem.	21 @ 22 prem.
Silver.....	9 @ 10 prem.	11 @ 12 prem.
Demand Notes.....	7 @ 7 1/2 prem.	.....

The Galena and Chicago road earned, the second week in July:

1862.....	\$54,547
1861.....	30,145
Increase.....	\$24,402

Michigan Southern shows in the same week a gain of \$15,483.

The receipts on the Grand Trunk Railway for the week ending July 5 were:

1862.....	\$63,004 12
1861.....	56,516 12
Increase.....	\$ 5,578 00

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:30 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day, Toledo & Day, Huntsville.....	5:20 P. M.	1:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Terre Haute and Lafayette and Chicago Mail.....	5:05 A. M.	11:10 A. M.
Indianapolis and Chicago Night Express.....	3:30 P. M.	11:50 P. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Evansville and St. Louis Mail.....	5:40 A. M.	10:45 P. M.
Ymour Accommodation.....	3:00 P. M.	8:45 A. M.
Evansville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.
One through train for Louisville and St. Louis Sunday evenings.		

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES slower than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omni-buses call for passengers as usual.
P. W. STRADER.
General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

W. H. L. NOBLE.
General Ticket Agent Indianapolis & Cincinnati Railroad.
E. F. FULLER.
General Ticket Agent Ohio & Mississippi R. R.

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES
TUBE CLEANERS, Steel Wire and Whalebone BRUSHES.

Artesian Oil and Salt WELL TUBING.
Lap Welded Steel BOILER TUBES.
Glass Enamelled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warming Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Piazza Greenhouses Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.

Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,

28 Platt Street, New York

KNOX & SHAIN, Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums by Franklin Institute)

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANA POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M.; Chicago at 6:00 A. M.; connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omni-buses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,

my21

CINCINNATI

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

NEW YORK, BOSTON,
AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal railroad offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DONLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.
Feb 6.

CHARLES MINOT, Gen'l Supt.

Baltimore and Ohio Railroad

RE-OPENED!



This great national thoroughfare is again open for

Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition,

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT,

Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and South-west. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$5.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore,
J. H. SULLIVAN, Gen. Wagon Agent, Baltimore, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

1861. 1861
FAST TIME.
LITTLE MIAMI
 AND
COLUMBUS AND XENIA
 AND
CINCINNATI, HAMILTON & DAYTON
RAILROADS.

On and after SUNDAY, Nov. 10. 1861, Trains depart as follows:

7:30 A. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Eton, Richmond Indianapolis and West; Lucasport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh; via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty.
 7:40 A. M.—Morning Accommodation—From Little Miami Depot.

3:30 P. M.—Accom—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express—From Cincinnati, Hamilton and Dayton Depot—For Hamilton, Richmond, Indianapolis and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express—From Cincinnati, Hamilton and Dayton Depot—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,

General Ticket Agent

Omni-buses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
 No. 67 West 6th St. bet Walnut & Vine
 CINCINNATI O

W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of
 O. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

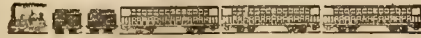
Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the highest quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that prices will be prepared to give entire satisfaction in every case.

1862. 1862.
Pennsylvania Central R. R.
 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE.
 FOR SAFETY, COMFORT AND SPEED,
 TO ALL THE EASTERN CITIES!
 THE TRACK IS STONE BALLASTED
 AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
 (with close connections from Western Cities.)
 ALL CONNECTING DIRECT TO NEW YORK,
 THROUGH PHILADELPHIA,
 AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
 ONE TRAIN RUNS DAILY (130 MILES.)
 VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
 BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.
 ON NIGHT TRAINS TO
 Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
 D. A. STEWART, Freight Agent, Pittsburgh.
 CLARKE & CO., Transfer Agents, Pittsburgh.
 R. C. MELDRUM & CO., Madison, Indiana.
 J. E. MOORE, Louisville, Ky.
 W. W. AIKMAN & CO., Evansville, Ind.
 R. F. SASS, St. Louis, Missouri.
 CLARKE & CO., Chicago, Illinois.
 W. H. & E. L. LANGLEY, Gallipolis, Ohio.
 G. B. NEAL, Parkersburg, Virginia.
 HALL & CO., Marietta, Ohio.
 H. S. PIERCE & CO., Zanesville, Ohio.
 McDOWELL & McCORM, Portsmouth, Ohio.
 R. MCNEELY, Marysville, Ky.
 J. P. JOHNSTON, Ripley, Ohio.
 JOHN TODD, Covington, Ky.
 G. L. HEATON, Cleveland, Ohio.
 R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
 L. L. HOUGHT, Gen'l Ticket Agent, Philadelphia.
 H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

BUSH & LOBDELL.
Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
 Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the
 Most Reasonable Terms.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET
 NEW YORK.

ALBERT BRIDGES.

JOEL C. LANE

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

through Distance 280 Miles;

42 Miles Shorter than any other Route
NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M., 3:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth Street Depot.

Freight trains leave at 6:00 P. M. and run directly through to Chicago without rebelling or transhipment.

JOHN BRANT, JR., Superintendent.

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent,
 33 Randolph Street, under Sherman House, Chicago, Ills.

W. H. F. HEWSON,
STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buy and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and takes collections

LOW'S RAILWAY DIRECTORY

FOR 1861

CONTAINING

THE NAMES AND RESIDENCES

OF THE

PRESIDENTS, DIRECTORS

AND

OFFICERS

OF ALL THE RAILROADS IN THE

UNITED STATES

they could be ascertained.

Published by James W. Low.

Price one dollar.

Sent postage prepaid by mail for one dollar and twenty cents.

A few copies only for sale at the office of the Railroad Record.

WRIGHTSON & CO. 167 Walnut Street.

N. W. BALDWIN,

MATHEW BAIRD.

M. W. BALDWIN & CO.
ENGINEER'S

BROAD AND HAMILTON ST.

Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring). Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotives.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned

THEODORE DEHON,
Broadway, New York

EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,

LOCOMOTIVE & RAILROAD
CAR SPRING

MANUFACTURER,

WILMINGTON, : DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky.,

Columbus, O.,

Lafayette, Ind.,

Dayton, O.,

Indianapolis, Ind.,

Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, low-priced FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE ON BOTH SIDES, impossible to unravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.

Feb 12.

WM. SUMNER & CO.

MOSELEY'S
WROUGHT IRON
ARCH BRIDGES

—AND—

Corrugated Iron Roofs

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.

Sst. 2.

MOSELEY & CO.

JAMES FOSTER, Jr. & Co.,
MATHEMATICAL AND PHILOSOPHICAL
INSTRUMENT MAKERS,

S.W. CORNER FIFTH AND RACE,

Cincinnati Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand, repairing attended to.

H. TWITCHELL,

JAMES FOSTER, Jr.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co. Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
Ag. 4, m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works
June 9.

THE SCHENECTADY

LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, President.

WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1½ to 10 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from ½ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—from 4 to 24 inches diameter, and branches for same, &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS,

CHAS. WHEELER,

THOS. T. TASKER, JR.,

S. F. M. TASKER,

HY. G. MORRIS.

BUTLER'S

MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroad officials for the South and West. For sale by 1,000 leading Stationers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, JULY 31, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

the space occupied by ten lines of Nonpareil—	
square, single insertion.....	\$100
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
column, single insertion.....	5 00
“ “ per month.....	10 00
“ “ six months.....	40 00
“ “ per annum.....	80 00
page, single insertion.....	15 00
“ “ per month.....	25 00
“ “ six months.....	110 00
“ “ per annum.....	200 00

Cards exceeding four lines, \$5.00 per annum.

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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	10.10 A. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.10 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	6.00 A. M.	5.40 A. M.
Bellefontaine Accommodation.....	5.20 P. M.	6.45 P. M.
Marionetta & Cincinnati—		
Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.
Ohio & Mississippi—		
Mail.....	5.05 A. M.	10.05 P. M.
Seymour Accommodation.....	3.00 P. M.	8.45 A. M.
Express.....	5.00 P. M.	6.53 A. M.
Indianapolis & Cincinnati—		
Mail.....	5.05 A. M.	11.10 A. M.
Chicago Express.....	3.20 P. M.	11.50 P. M.
Dayton & Michigan—		
Toledo, Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.40 P. M.	10.10 A. M.
Cincinnati, Wilmington & Zanesville—		
Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.
Kentucky Central— (City time.)		
First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami and Cincinnati, Hamilton & Dayton, Marionetta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

RAILROADS OF PENNSYLVANIA.

In our last issue we gave the railroad stock, bonds, etc., of the State of Pennsylvania as given in the general reports to the State Auditor. In the same report there are many other items of great interest which we propose also to notice. The length of road owned by 35 companies reporting, as given in our last, is 2,735 miles. Of these 35 companies, 25 have a gauge of 4 ft. 8½ in: 4 companies have a gauge of 4 ft. 10 in: 2 companies have a gauge of 4 ft. 3 in: 1 company a gauge of 4 feet: 2 companies a gauge of 6 ft: and one company a mixed gauge of 6 ft. and 4 ft. 8½ in. The large majority will thus be seen to prefer the 4 ft. 8½ in. gauge to any other. The very narrow gauge of 4 ft. is used only by the Chester Valley Railroad, 21½ miles in length: and the 4 ft. 3 in gauge is used only by the Delaware and Hudson Coal and Railroad Company, 30 miles in length, and the Pennsylvania Coal and Railroad Company, 47 miles in length. While the 6 ft. gauge is used on the Delaware, Lackawanna and Western Railroad, 113 miles in length, and on the Tioga Railroad 29.61 miles in length, and the mixed gauge is used only on the Lackawanna and Bloomsbury Railroad 80 miles in length. The war between the gauges has been waged long and fiercely, but the decided preponderance of the narrower gauge would seem to indicate that here, at least, it was most in favor.

The weight of rail used on the roads of Pennsylvania varies from 15 to 83 lbs. to the yard—the majority seeming to prefer a rail of 50 to 60 lbs to the yard. The Pennsylvania Railroad uses rails weighing 60, 83, and 64 lbs. The Reading Railroad uses rails weighing 64 and 68 lbs. The Delaware, Lackawanna and Western Railroad uses rails of 65 and 75 lbs.

The number of engine houses and shops in use on all the roads is 150, or about one to every 18 miles of road. The number of engines in use is 846—which is equivalent to one engine to every 3¼ miles of railroad in operation. The number of cars in use is as follows:

	No. of cars.
First class passenger cars.....	370
Baggage, mail and express cars.....	133
Freight cars.....	12,277
	12,780

This total is equivalent to about 5 cars of all grades to every mile of railroad in use. There is one first class eight-wheeled passenger car to about every 7½ miles of road, and one baggage, mail and express car for about every 20 miles of railroad, while there is fully 4½ freight cars to every mile of railroad in operation. The proportion of freight cars to the miles of railroad operated in this State is probably greater than in any other, from the fact that many of the roads are almost exclusively freight roads, used for transporting coal from the mines to manufactories and the seaboard. The Huntington and Broad

Top Mountain Railroad, for example, is 45½ miles in length and has but one passenger car, and its freight cars are not reported. While the Delaware and Hudson Coal and Railroad Company, which is thirty miles in length, has 4 first class passenger cars and 1,850 freight cars. The Pennsylvania Railroad has 113 first class passenger cars and 3,200 freight to a length of 411 7-10 miles. The Pennsylvania Coal and Railroad Company, to a length of 47 miles has no passenger cars and 1,900 freight cars, all used in the transportation of coal. On many of the coal roads of Pennsylvania the cars are owned by the parties working the mines. So that it is quite probable that the equipment of freight cars on the roads of this State is even much greater than that given in the report.

The number and kind of bridges on the railroads of the State is reported as follows:

	No. of bridges.
Iron.....	104
Wooden.....	807
Stone.....	161
Total of all kinds.....	1072

This is equal to a bridge every 2¼ miles of the railroad, which is, to say the least, very close proximity to each other. A few years ago iron bridges were a novelty every where, yet such is their intrinsic merit, that we see plainly from the above that now fully one-tenth of all the bridges on the railroads of this State are made of iron. Nearly one-sixth are made of stone. In this connection it is worthy of notice also that the best managed railroads in the State have set the example of building iron bridges. The Pennsylvania Railroad has 70 iron, 61 wooden, and 17 stone bridges. The Reading Railroad has 18 iron, 20 wooden, and 52 stone bridges. We believe these two roads replace all their wooden bridges as they wear out and become useless by either iron or stone structures. In this respect other roads would do well to follow their example. Wooden bridges from their very nature are more perishable and much more liable to accidents than iron or stone ones—need constant repairs and are at best very unsafe structures. While iron and stone bridges are safer, more durable, and less liable to accident. They cost a little more in the outset, but that difference is soon made up by the difference of repairs largely in their favor, the increased safety both to passengers, freight and equipment of the roads and diminished liability to accident and detention.

Of the two iron and stone bridges, the latter are much the more expensive, but unquestionably the best when they can be covered with sufficient depth of earth to prevent the surging of the locomotive from destroying the masonry of the arch. But where this can not be accomplished a good iron bridge is far superior to all other kinds, and is unquestionably the most economical in the long run.

RACINE AND MISSISSIPPI RAILROAD.

We are in receipt of the annual report of Manager of this road to the Trustees in possession of the property. The Manager says:

The business of the past year shows an increase over the previous year, although it was greatly reduced by the unremitting competition and opposition of the Illinois Central and Galena and Chicago Railroads. Fortunately the competition is now at an end, and satisfactory relations are established with the Illinois Central Railroad Company, by which your road is allowed the same privileges for the interchange of business as are allowed to the Galena Co. An arrangement has also been made with the Galena Company for the maintenance of a tariff on fair and remunerative rates. Since these agreements took effect, on the 15th May, the business has been working very satisfactorily for your road. A large amount of produce from the Mississippi, at Dunleith, the terminus of the Illinois Central Railroad, has been carried over your road to Chicago, Racine, and Milwaukee. With this business there has been a greater demand for rolling stock than could be supplied by the trustees; but the business has been materially assisted by the Illinois Central and Chicago and North Western Companies having, by agreement, provided their proportion of cars for the extent of mileage in which they are respectively interested.

The local business of the road in the winter was light; but the business derived from the 20 miles of the Northern Illinois Railroad, which was opened on the 1st October, more than made up for what might have been expected from the Illinois Central had the running arrangements of the previous year been in operation. The Northern Illinois Railway will be completed to the river so as to be opened to the public on 1st September. The grading is nearly completed; the material for the track is on hand, and is now being laid down; in the course of ten days the track will be laid to Mount Carroll, and from there it will be continued to Savanna, ten miles further, at the rate of three-quarters of a mile a day, so that engines may run through to the river by the first week in August. The month of August will be taken for finishing up and completing grading necessary to be done in the town of Savanna, which could not well be accomplished if interrupted by business.

On the Northern Illinois Railroad, on 1st October, a working arrangement was entered into for one year, by which the entire control of that road was secured, so that it could be operated as freely as if it was in fact an extension of your road. Fifty per cent. of the gross earnings are allowed to the company, calculating the whole receipts from Lanark

(the western terminus of the road) to Racine, and allowing the company its proportion of 20 miles, the company undertaking to maintain its own road bed in good running order. It will be necessary to enter into a new arrangement with the company on completion of its road to the river.

On the Northern Illinois Railroad two new towns have grown up named Shaanon and Lanark, which have become the centers of business for large sections of the country. In addition to the towns which now occupy positions which were corn fields a year ago, the adjoining land is marked by new roads, new lines of fencing, new farm houses, and long stretches of newly broken prairie land. At Mount Carroll the road reaches an old settled country, with improved farms and substantial buildings, and the town itself is beautifully situated, contains a number of good buildings, and has also the advantage of a water power with a mill and distillery established upon it. As the county town of Carroll County, and the capabilities it possesses, the railroad will undoubtedly give rise to its rapidly increasing in business and population. At Savanna there is as favorable an opportunity for establishing an important business point as at any other point on the east side of the river. The town has a rock foundation and is safe from damage during the high states of the water, while at all stages of water its landing places are convenient. Since railroads have reached points north and south of Savanna, the town has been at a great disadvantage, but will now be able to take a fair share of the river business, to which its natural location entitles it. Sabula, on the Iowa side, has been at great disadvantage, and will be greatly benefited by the completion of the road.

With the opening of the Northern Illinois to Savanna, your road will be placed in the position of having two friendly connections with the Mississippi river, by the Illinois Central Railroad at Dunleith, and the Northern Illinois at Savanna. The advantages of the other connections of your road will be fully demonstrated the coming year when a greater field to draw business from will be opened to it. The fact that you can offer at two ports on the Mississippi the shortest route to the three lake ports, Chicago, Racine and Milwaukee, and that shippers may send their business as they may think most advantageous, can not fail to draw to your road, large amount of the business of the Mississippi river from north and south as well as from the west side of the river, which is one of the richest and most cultivated counties of Iowa. It appears to your manager, that the prospect of business is only limited by the powers at command for operating it. The rolling stock will not be sufficient at first, but it has been increased and will be added to gradually to keep up with the demand, as far as may appear prudent. On this subject particulars

will be found in the Superintendent's report. It is hardly known yet, but will soon be appreciated after the road is in operation to Savanna, that the distance to the Mississippi by your road from Milwaukee is 27 miles shorter than by the Milwaukee and Prairie du Chien road, and 35 miles shorter than by the La Crosse road. The distance from lake to river at Racine is 23 miles less, making a route fifty miles shorter than the Prairie du Chien, and 58 miles shorter than the La Crosse.

Another favorable result has already been attained by the extension of the Northern Illinois Railroad; at the letting of the mail contracts for the next four years, from July 1st, the contract has been granted for the through route from Racine to Savanna, and the classification of your road as a mail route has been raised.

The number of cars added to the road was essential, and still there is a deficiency. Two new freight locomotives have been ordered, to be delivered in the month of October. The order has been given upon a carefully made up specification for two coal burners. At the relative prices of coal and wood, the former is undoubtedly the most economical fuel for use on your road; and the difference in its favor will increase from year to year, as there is little likelihood of coal increasing much in price without wood advancing in greater proportion.

The increase of work in repairs of locomotives has recently become difficult to accomplish, from the imperfect accommodations for the purpose, which have been the cause of increased cost upon all work done, and it became necessary to provide better arrangements. The most feasible plan of providing what was needed appeared to be to complete the original design of a work-shop of brick upon a stone foundation, which had been put in by the company and left unfinished. The building is now erected, making a workshop ample dimensions for all the work the road can require for years to come, most conveniently placed, connecting the engine house with the blacksmith shop, and having an independent track for engines to enter it. The cost of the building is \$2,500, and that amount will be more than saved in repairs in one year from the conveniences provided.

The currency difficulties alluded to in last year's report are now at an end, but continued for some time during the last year. Exchange on New York was for months as high as 10 per cent, causing the item of exchange to amount to \$2,188 60 on the debit side, as against \$362 85 on the credit side in the previous year. The bank issues of Wisconsin and Illinois are now of very limited amount and pass current at par with eastern bank bills and Treasury notes, and exchange is at par. The Treasury notes if kept within limit of what is required for the business wants of the country, will be a great boon to the West,

by affording a safe circulating medium, current all over the country. This money will not only be serviceable as affording safety in the daily transaction of business, but by the facilities it provides for business will tend to develop the resources of the country, and add largely to the volume of business.

The Northwest has undoubtedly been affected by the lamentable war now raging in the country, but in a manner which no casual observer would detect. It can not be but that prices have been lower than they would have been had the condition of the country been one of peaceful industry and the arts of peace, which can not be carried on without contributing to the profits of railroads, must have been greatly discouraged. In passenger business there is a very marked falling off, attributable to a great degree to the number of men who have joined the army and gone out of the State, and to some extent to the limited amount of trading as compared with ordinary times, when agents in all branches of business industriously seek custom in every town and settlement, even of the most humble pretensions. Many of the roads have had some compensation for the deficiencies alluded to, in carrying troops and munitions of war for the Government, but your road is not situated so as to participate in such source of revenue beyond a very limited amount. Your road is eminently intended to work to greatest advantage in aid of the labors of peace and good will, the end devoutly prayed for by all good citizens, and which we may loyally anticipated as the greatest gain to be achieved at the present time.

The following is the statement of the operations of the Racine and Mississippi Railroad for the year ending May 10, 1862:

The earnings have been—

From passengers.....	\$51,477 37
" freight.....	187,910 31
" mails and other sources.....	6,426 11
	\$245,813 79
Operating Expenses.....	177,173 79
Net Receipts.....	\$ 68,640 00

The Northern Illinois Railroad was opened to Lanark, 20 miles west of Freeport, on the first day of October, 1861, and has been operated, since that date, by the trustees of the R. and M. R. R. under the agreement referred to in your report.

The statement of earnings stand as follows:

Gross earnings as above.....	\$245,813 79
N. I. R. R. Net Receipts—	
From Passengers.....	\$5,304 60
" Freight.....	8,150 99
" other sources.....	34 72
	10,490 31
Operating.....	256,304 10
N. I. R. R. track repairs.....	\$177,173 79
	3,331 06
	180,504 85
Total Net Receipts.....	\$ 74,799 25

The following table shows the results of the three years' management of the road by the Trustees, treating N. I. R. R., as part of the R. and M. R. R. since Oct. 1st 1861:

	1860.	1860.	1860.
Gross receipts....	\$166,916 03	\$220,850 04	\$256,394 10
Operating.....	131,790 14	152,411 48	180,504 85
	\$ 35,125 89	\$ 68,438 56	\$ 75,798 25

	1860.	1860.	1860.
Operating to Gross Receipts	78.9	69.0	70.4

The competition of the Illinois Central R. Co., referred to in last year's reports, has materially decreased our earnings during 11 months of our fiscal year, ending May 10th, 1862. Early in June, 1861, the tariff on grain from Freeport to the lake was cut down from 16 cents per 100 lbs. to 10 cents. All classes of freight suffered in like proportion. At Beloit the competition was opened by the Galena Company, and to protect dealers between Beloit and Freeport, proportionate reduction in rates were made.

From careful estimates of the traffic of the road during eleven months of competition forced on us by these roads, it appears that at the regular tariff rates which ruled during the year ending May 10th, 1861, our receipts would be increased as follows:

On Flour and Grain to Milwaukee deducting proportion due M. & C. R. R.....	\$16,168 40
On Flour and Grain to Chicago deducting proportion due C. & N. W. R. R.....	4,340 96
On Flour and Grain to Racine.....	15,004 95
On Westward bound freight, (low estimate)....	10,000 00

Total loss in Net Earnings \$45,914 3

Add \$45,514 31 to our gross receipts and we have a total of \$301,818 41 to be set off against \$177,173 79 operating. This estimate of reduction of gross revenue on freight carried over the road, entirely discarding the loss consequent on being cut off from Iowa and Mississippi river business by the I. C. R. R., is legitimate for purposes of comparison. We thus show that the operating of this year is only 58.7 per cent. of gross earning, against 69.0 per cent. for year previous, and 78.9 per cent for year ending May 10, 1860. This exhibit satisfactorily sustains the statement in my last annual report "that the increase of operating expenses will be but a nominal per centage of increased gross receipts."

The construction of the Northern Illinois Railroad, to prevent which the Illinois Central Company instituted the competition of the past year, places us in a strong position which can not be attacked with impunity, and I regard it as forming a good guarantee for the maintenance of friendly relations.

	1862.	1861.	Inc.	Dec.
Miles run by Passenger Engines.....	77,658	97,654		19,996
Miles run by Freight Engines.....	165,656	125,218	40,438	
Miles run by Wood and Gravel Engines.....	10,910	5,755	5,155	
Total Miles run.....	254,224	228,627	25,597	
Average Miles to one pint of oil.....	13.60	13.00	0.60	
Average Miles to one Cord of Wood.....	35.82	42.09		
Total Cost of Oil and Waste, Wood, Wages, and Repairs of Locomotives.....	\$57,654.47	\$46,950.22	\$10,704.31	
	cts.	cts.	cts.	cts.
Average cost per mile run for repairs.....	6.81	5.38	1.43	
Average cost per mile run for oil and waste.....	0.86	1.05		0.19

	1860.	1860.	1860.
Average cost per mile run for wood.....	8.70	7.72	0.98
Average cost per mile run for engineers.....	3.52	3 26	0.04
Average cost per mile run for firemen.....	1.78	1.72	0.01
Average cost per mile run for repairs.....	1.30	1.32	0.02
Total average cost per mile run.....	22.67	20.53	2.14

The above comparative table of locomotive expense and performance includes the operating of the N. I. Railroad. Last year locomotives ran 6 27-100 miles more to the cord than this year, a difference which can readily be explained. This year passenger locomotives ran 19,996 miles less and earned \$4,694-44 more than in the previous year.

The gross earnings of freight engines per mile is \$1 17 against \$1 32 last year, a decrease of 13 cents, which is accounted for by the competition rates before referred to, and the large amount of timber, lumber, ties, posts, rails, chairs and other material used in the construction of the N. I. R. R., the freight on which was charged at the actual cost of transportation.

During the year the manager has built a new machine shop 120 by 60 feet. There has been laid 19,879 new ties and 4901 feet of new rail. There has been built 44 new house freight cars, making the total equipment of the road 296 house freight cars, 56 platform cars, 9 passenger cars, 3 mail and 5 baggage cars. There has been a total from accident or loss of life during the year.

SWITCHES.—We notice an improvement recently adopted in the Little Miami R. R. for the convenience of the brakemen. The improvement consists in placing a small piece of rubber packing against the ratchet which holds the brake from unwinding. Hitherto the brakeman has placed his foot against the ratchet to hold it to its place, and thus had to see not only to the winding up of the wheel, but also to preventing it slipping back. With this arrangement the rubber spring holds the ratchet in place of the brakeman's foot; thus the brakeman has only to think of turning the wheel. We regard this as a decided improvement, and as it is not patented and is cheap, have no doubt it will become more generally used.

THE STONINGTON LINE.—The old Stonington Line continues to make regular trips from New York to Boston via Stonington and Providence. The steamers between New York and Stonington are large, commodious, and models of neatness and comfort. For elegance and safety they cannot be surpassed, and the Railroads with which they connect from Groton to Providence and thence to Boston are well managed lines, furnished with elegant cars and passing through a pleasant country. Baggage is now checked through to all the principal points.

THE NEW TAX LAW.

The following provisions of the new tax law relating to railroads are taken from the official copy published by authority of the House of Representatives. We place the sections relating to the direct tax on the roads first. In addition to these, the roads will indirectly have to pay a duty of 3 per cent ad valorem on all manufactured articles which they use:

RAILROADS, STEAMBOATS, AND FERRY-BOATS.

Sec. 80. *And be it further enacted*, That on and after the first day of August, eighteen hundred and sixty-two, any persons or persons, firms, companies, or corporations owning or possessing or having the care or management of any railroad or railroads upon which steam is used as a propelling power, or of any steamboat or other vessel propelled by steam-power, shall be subject to and pay a duty of three per centum on the gross amount of all the receipts of such railroad or railroads or steam vessel for the transportation of passengers over and upon the same; and any persons or persons, firms, companies or corporations, owning or possessing, or having the care or management of any railroad or railroads using any other power than steam thereon, or owning possessing, or having the care or management of any ferry-boat, or vessel used as a ferry-boat, propelled by steam or horse power, shall be subject to and pay a duty of one and a half per centum on the gross receipts of such railroad or ferry boat, respectively, for the transportation of passengers over and upon said railroads, steamboats, and ferry-boats, respectively; and any person or persons, firms, companies, or corporations, owning, possessing, or having the care or management of any bridge authorized by law to receive toll for the transit of passengers, beasts, carriages, teams, and freight of any description over such bridge, shall be subject to and pay a duty of three per centum on the gross amount of all their receipts of every description. And the owner, possessor, or person or persons having the care and management of any such railroad, steamboat, ferry-boat, or other vessel, or bridge, as aforesaid, shall, within five days after the end of each and every month commencing as hereinbefore mentioned, make a list or return to the assistant assessor of the district within which such owner, possessor, company, or corporation, may have his or its place of business, or where any such railroad, steamboat, ferry-boat, or bridge is located or belongs, respectively, stating the gross amount of such receipts for the month next preceding, which return shall be verified by the oath or affirmation of such owner, possessor, manager, agent, or other proper officer, in the manner and form to be prescribed from time to time by the Commissioner of Internal Revenue, and shall also monthly, at the time of making such return, pay to the collector or deputy collector of the district the full amount of duties which have accrued on such receipts for the month aforesaid; and in case of neglect or refusal to make said lists or return for the space of five days after such return should be made as aforesaid, the assessor or assistant assessor shall proceed to estimate the amount received and the duties payable thereon, as hereinbefore provided in other cases of delinquencies to make return for purposes of assessment; and for the purpose of making such assessment, or for ascertaining the correctness of any such return, the

books of any such person, company, or corporation, shall be subject to the inspection of the assessor or assistant assessor on his demand or request therefor; and in case of neglect or refusal to pay the duties as aforesaid when the same have been ascertained as aforesaid for the space of five days after the same shall have become payable, the owner, possessor, or person having the management as aforesaid, shall pay, in addition, five per centum on the amount of such duties; and for any attempt knowingly to evade the payment of such duties, the said owner, possessor, or person having the care or management as aforesaid, shall be liable to pay a penalty of one thousand dollars for every such attempt, to be recovered as provided in this act for the recovery of penalties; and all provisions in this act in relation to liens and collections by distriant not incompatible here with shall apply to this section and the objects therein embraced: *Provided*, That all such persons, companies, and corporations shall have the right to add the duty or tax hereby imposed to their rates of fare whenever their liability thereto may commence, any limitations which may exist by law or by agreement with any person or company which may have paid or be liable to pay such fare to the contrary notwithstanding.

On railroad iron and all other iron advanced beyond slabs, blooms, or loops, and not advanced beyond bars or rods, and band, hoop, and sheet iron not thinner than number eighteen wire-gauge, and plate iron not less than one-eighth of inch in thickness, one dollar and fifty cents per ton; on railroad iron, re-rolled, seventy-five cents per ton; on band, hoop, and sheet iron thinner than number eighteen wire-gauge, plate iron less than one-eighth of an inch in thickness, and cut nails and spikes, two dollars per ton: *Provided*, That bars, rods, bands, hoops, sheets, plates, nails, and spikes, manufactured from iron upon which the duty of one dollar and fifty cents has been levied and paid, shall be subject only to a duty of fifty cents per ton in addition thereto, anything in this act to the contrary notwithstanding. On stoves and hollow ware, one dollar and fifty cents per ton of two thousand pounds; cast iron used for bridges, buildings, or other permanent structures, one dollar per ton; *Provided*, That bar iron used for like purposes shall be charged no additional duty beyond the specific duty imposed by this act. On steel in ingots, bars, sheets, or wire not less than one fourth of an inch in thickness, valued at seven cents per pound or less, four dollars per ton; valued at above seven cents per pound, and not above eleven cents per pound, eight dollars per ton; valued above eleven cents per pound, ten dollars per ton.

Sec. 81. *And be it further enacted*, That on and after the first day of July, eighteen hundred and sixty-two, any person or persons owning or possessing, or having the care or management of any railroad company or railroad corporation, being indebted for any sum or sums of money for which bonds or other evidences of indebtedness have been issued, payable in one or more years after date, upon which interest is, or shall be, stipulated to be paid, or coupons representing the interest shall be or shall have been issued to be paid, and all dividends in scrip or money or sums of money thereafter declared due or payable to stockholders of any railroad company, as part of the earnings, profits, or gains of said railroad companies, shall be subject to and pay a duty of three per centum on the amount of all such interest or coupons or dividends whenever the same shall be paid; and said rail-

road companies, or railroad corporations or any person or persons owning, possessing, or having the care or management of any railroad company or railroad corporation, are hereby authorized and required to deduct and withhold from all payments made to any person, persons, or party, after the first day of July, as aforesaid, on account of any interest or coupons or dividends due and payable as aforesaid, the said duty or sum of three per centum; and the duties deducted as aforesaid, and certified by the president or proper officer, of said company or corporation, shall be a receipt and discharge, according to the amount thereof, of said railroad companies or railroad corporations, and the owners, possessors, and agents thereof, on dividends and on bonds or other evidences of their indebtedness, upon which interest or coupons are payable, holden by any person or party whatsoever, and a list or return shall be made and rendered within thirty days after the time fixed when said interest or coupons or dividends become due or payable, and as often as every six months, to the Commissioner of Internal Revenue, which shall contain a true and faithful account of the duties received and chargeable, as aforesaid, during the time when such duties have accrued or should accrue, and remaining unaccounted for: and there shall be annexed to every such list or return a declaration under oath or affirmation, in manner and form as may be prescribed by the Commissioner of Internal Revenue, of the president, treasurer, or some proper officer of said railroad company or railroad corporation, that the same contains a true and faithful account of the duties so withheld and received during the time when such duties have accrued and should accrue, and not accounted for, and for any default in the making or rendering of such list or return, with the declaration annexed, as aforesaid, the person or persons owning, possessing, or having the care or management of such railroad company or railroad corporation, making such default, shall forfeit, as a penalty, the sum of five hundred dollars; and in case of any default in making or rendering said list, or of any default in the payment of the duty, or of any part thereof, accruing of which should accrue, the assessment and collection shall be made according to the general provisions of this act.

MANUFACTURE OF ARMOR PLATES.

Captain J. Ford, at the Institution of Naval Architects, March 27th, 1862, read a paper, in which he said that the British Navy must be reconstructed by the substitution of armor-plated ships of war for its old wooden walls, is now universally admitted. It becomes, therefore, a most important question, what is the best method of manufacturing the armor plates? This subject was first brought under the consideration of the writer when the Thames Iron Works Company received the order for building the *Warrior*, and it became a question with the firm whether they should erect steam hammers for the purpose of forging, or increase the power of their mills for rolling the plates. At that period, after careful consideration, the conclusion was adopted, that the plan of hammering would produce the best results, and subsequent experience has, in the opinion of the writer, fully borne out that view. That the best material for these plates is iron appears to be established by all the experiments which have been made; many trials of plates of homogeneous metal, or steel of various descrip-

tions, have shown that, although thin steel plates have resisted shot better than iron ones, when the thickness was increased beyond $\frac{3}{4}$ inch, there was visible inferiority, and the thicker plates altogether failed.

Two qualities of the iron appear to be of prime necessity—toughness and solidity. If the iron is hard and brittle, it is easily cracked and broken by the shot; if unsound, either from blisters or lamination arising from imperfect welding, the power of resistance is proportionately diminished. It has been conclusively proved that any given thickness of iron, if composed of layers of thin plates, has very little resisting power in comparison with the same thickness of solid plate; and a plate apparently solid, but imperfectly welded, exhibits the same weakness.

The process of rolling plates $\frac{1}{2}$ inch thick has been described by the head of the eminent firm of Messrs. Brown & Co., of Sheffield, in a paper read by him at the Institution of Mechanical Engineers, Birmingham, as follows:—Bars, 12 inches broad, 1 inch thick, are first rolled; five of these are then piled and rolled into a rough slab; two of these slabs are rolled into a plate $\frac{1}{2}$ inch thick; four of these plates are then piled and rolled into a plate $\frac{3}{4}$ inches thick; and, finally, four of these $\frac{3}{4}$ -inch plates are piled and rolled into the finished plate. The hammered plates manufactured at the Thames Iron Works are made in the following manner:—Scrap iron of the best description is carefully selected and cleaned, piled, hammered into a bloom, and then rolled into bars 6 inches broad, 1 inch thick; these bars are cut up, piled, and again hammered into a slab; several of these slabs are put together, heated, and hammered to the form required, and this process being repeated, the plate goes on gradually increasing to the length required.

In the manufacture of the best hammered plates there is no mystery; it depends simply on the selection of the best material, and the employment of the most skilled and careful workmanship.

The writer confidently believes that scrap iron, rolled and hammered as before described, is decidedly the best material, and superior to any description of the puddled iron from which all the rolled plates are understood to be made. That the toughness of iron is dependent greatly upon the amount of working it undergoes, can not be doubted. This working has already been given to a great extent to scrap iron, and the process of rolling it into the 6-inch bars, which are the raw material of the future plate, gives it a degree of toughness and fibre which it appears to retain through all the subsequent heating and hammering.

The tendency of hammering to harden does not take away this toughness, and the process of annealing restores much of what is lost. Numerous experiments on single plates which have been fired at, and close observation in the drilling, planing, and bending of the large quantities of plates which have been hammered in this manner, have shown that the brittleness which has been attributed to hammered iron is entirely avoided, and that the toughness of the iron is superior to that of the best rolled plates which have hitherto been produced. Solidity or freedom from blisters or lamination is unquestionably more certain in the hammering process; and when it is considered that, to produce a rolled plate, 160 thicknesses of iron must be perfectly welded at every point throughout the finished plate, under penalty of there being lamination, the frequent occurrence of this evil would seem to be inevitable; the presence of dirt between any

two layers, or the failure to reach a welding heat in any part of the centre of the large masses which have to be dealt with, being certain to produce this fatal result.

It must also be remembered that, as the hammered plate is gradually built up of the slabs before described, a comparatively small portion of the mass requires to be placed in the furnace and heated at one time, while in the rolled plate the final pile, 10 inches in thickness, and weighing six or seven tons, must be brought to a welding heat at once, and the operation of rolling completed before this heat is lost. To obtain this heat throughout the mass without burning the edges most exposed to the fire, can hardly be reckoned as a uniform result, and when this has been accomplished, and delay in dragging it from the furnace, getting it to the rolls, forcing it between them, and completing the rolling process, will spoil it, and the loss even of a few moments may be fatal to the success of the operation.

These difficulties of course increase with the thickness and weight of the plates; the foregoing observations are made with reference to plates $\frac{1}{2}$ inches thick, such as are on the sides of the *Warrior* and her companions; but when, as in the case of the *Minotaur* and her sister ships now building, the thickness of the plates is increased to $\frac{5}{8}$ inches, it may well be doubted if those difficulties can be successfully overcome in the rolling process.

It will not perhaps be out of place to refer to the return made by an order of the House of Commons, dated May 17th, 1861, of the mode of manufacturing the armor plates of the *Warrior* and three of her companion ships, and the number of plates condemned in the process of manufacture, with the reasons for their condemnation. The *Warrior's* plates, about 950 tons, were all hammered, and only five plates proved faulty in the process of manufacturing. Of the plates for the *Defence* and *Resistance*, together about 1200 tons, all but six were rolled; 45 were condemned for being blistered, laminated, or overheated; and of the plates for the *Black Prince*, 950 tons in all, of which above 100 tons were rolled, and the rest hammered, 10 rolled plates and 32 hammered plates were condemned. It is to be observed, however, that in the manufacture of the hammered plates for the *Black Prince*, the whole operation was performed under the hammer, and the process of rolling the initial bloom into 6 inch bars was omitted. It is understood that, in the hammered plates which have failed comparatively under trial, this preliminary rolling has not been adopted, and to this, to some extent, their failure to stand the test may be due.

The experiments made at Shoeburyness by the Plate Committee on plates of various thicknesses, and upon the *Warrior* and other targets, have not yet been reported on by the Committee, but it is understood by the writer, who, by the courtesy of the Committee, has had the opportunity of observing many of the experiments, that those manufactured as described at the Thames Iron Works have exhibited uniform and superior excellence, which has also been exemplified in all the trials of sample plates selected by the government officers, and fired at at Portsmouth.

The attempt has recently been made to effect a combination of the two processes of hammering and rolling; the slab 10 inches or thereabouts in thickness, being forged under the hammer, then heated *en masse*, and rolled in the same manner as the pile, forming the final process described for the rolled plate.

To this the writer objects, that this plan involves the serious difficulties already adverted to as consequent on the heating and rolling of so large a mass. Thus far experiment confirms this opinion, as the plates manufactured in this manner have proved under trial greatly inferior both to the rolled plates and those hammered at the Thames Iron Works.

In the minor qualities of smoothness of surface and uniformity of thickness, it may be observed that the hammered plates are quite equal to the rolled, and with respect to cost of production up to the thickness of $\frac{1}{2}$ inches, the market price of hammered and rolled plates is the same; but if the thickness and weight be increased, the cost of rolling will, without doubt, be seriously enhanced, while that of hammering will remain but little, if at all, altered.—*Mechanics' Mag.*

RATAN DEEP-SEA ELECTRIC TELEGRAPH CABLE.

Mr. C. S. Duncan, the inventor, in adopting the Ratan Cane as an external protecting cover to the conducting wire and insulating medium, desires to employ a material which has not hitherto been used for deep-sea cables; he has been guided in the choice of cane by its being a fibrous substance, having great flexibility, lightness, strength, and durability when submerged. The cane has long been used by the Chinese and Malays for cables as applied to anchors, and for making fast their junks to the banks of the great rivers and canals throughout China; and the testimony of officers in the Royal Navy, and merchants of great eminence, who have resided for many years in that country, corroborate this fact; and the ocean animalculæ are not known to touch or destroy it.

The natural silicated rind has been submitted to great hydraulic pressure, and is found to be impermeable to the passage of water into the interior fibre, and, like all other woody substances when long submerged, as in the case of the timbers of a vessel that has foundered at sea, becomes eventually petrified and indestructible. The cane itself neither possesses resinous, oleaginous, nor saccharine matter; consequently, no destructive chemical change is effected by submersion.

The cane can be obtained in inexhaustible quantities in Lower Bengal, Ceylon, Singapore, and China, in lengths of fifty feet and upwards, of an uniform gauge when properly selected, and at a price so moderate as to render this cable the cheapest that can be constructed, according to the statement of the inventor.

Cane is susceptible of many combinations, either with or without wire, laid on in a spiral form, and is prevented from kinking by using strands, either of wire, hemp, or cane, laid on at right angles to the length.

The joints under test are as strong as the cane itself, and arranged to fall at intervals so as to break joint.

In paying out the cable, very slight machinery appears to be required; and instead of its descending perpendicularly from the ship's side, it will submerge in an even or horizontal position, having sufficient weight to overcome flotation, and cause it to gravitate gradually to the bottom of the ocean.

The Ratan cane, as a non-conductor, will not generate heat in the hold of the vessel, thus keeping the insulating medium at all times cool and equal, and allowing the tests to be carried on with greater certainty. The

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Reg. sold.	
Atlantic and Great Western.....	N.Y. & Pa.		48	\$	\$	\$	\$	\$								
Baltimore and Ohio.....	Md.	65	380	13,111,800	10,781,833	566,070	922,203	2,305,788	Sept. 30, 1860	Maryland Sterling.	3,000,000	5				
do do										"	2,500,000	6	88	1885		
do do										"	700,000	6	84	1880		
do do										"	1,128,500	6	90	1875		
do Washington Branch.....	Md.		30	1,650,000						"	1,000,000	6		1867		
Bellefontaine and Indiana.....	Ohio & Ind		118	1,859,813	1,256,750	139,125	314,090	8,795	Dec. 1860.	1st Mortgage	791,000	7	55	1866		
do do										2d "	100,000	7		1870		
Buffalo and State Line.....	N.Y. & Pa.	122	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860							
do do																
Burlington and Missouri.....	Mo.	132	75	1,101,422	1,428,000		104,869	21,072		1st Mortg. 1st Div.	595,000	6	100	1864		
Camden and Amboy.....	N. J.		96	3,084,400	8,820,000		1,997,465	733,950	Dec. 31, 1860	1st Mortgage	370,000	7	62	1861		
Central Ohio.....	Ohio		137	In hands of Receiver.	3,673,000	1,126,438	597,633	71,356	Aug. 1, 1859	1st "	450,000	7		1864		
do do										2d "	200,000	7		1865		
do do										3d "	80,000	7		1865		
do do										4th " S. F.	950,000	7		1865		
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage	1,365,800	7	105	1865 & 1870		
do do										2d "	140,000	7	100	1875		
Chicago, Alton and St. Louis.....	Ills.		222	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage	600,000	7				
do do										2d "	2,000,000	7				
Chicago and Milwaukee.....	Wis.			No report received.						3d "	1,533,000	7				
do do										1st Mortgage	1,000,000	10				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		194	2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	2d "	400,000					
do do										1st Mortgage	200,000					
Chicago and Rock Island.....	Ills.	53	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage	1,250,000	7	80	Feb. & Aug.		
Chicago, Burlington and Quincy.....	"	76	138	4,689,340	4,814,515		1,514,428	761,830		Gen'l 1st Mortgage	3,600,000	7	48	Feb. & Aug. 1		
do do										2d "	2,000,000	6	26	May 1.		
do do										1st Mortgage	2,000,000	7	105	1870		
do do										Cons. 1st Mort. S. F.	2,172,000	8	106	1873		
do do										2d " S. F.	613,000	8	108	1870		
do do										1st Mort. Chi. & Aur.	330,000	7		1867		
do do										2d "	303,000	7		1869		
do do										1st " Cent. Mil. Tract	392,000	7		1864		
do do										2d " " "	245,000	8		1868		
Chicago, Iowa and Nebraska.....			82	No report												
Cincinnati and Chicago Air Line.....	Ind.															
Cincinnati, Hamilton and Dayton.....	Ohio.	99	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage	441,000	7	100	1867		
do do										2d "	950,000	7	100	1880		
Cincinnati, Wilmington & Zanesville ..	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage	1,300,000					
do do										2d "	532,000					
do do										3d "	104,000					
do do										Income.	305,500					
Cleveland and Mahoning	Ohio.	68		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage	850,000	7	80			
do do										2d "	499,000	7				
do do										3d "	344,000	8				
Cleveland and Pittsburgh.....	Ohio & Pa.	21	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1860		
do do										2d " M. L. or 1st Ex.	1,188,000	7	91	1873		
do do										3d 2d Ex.	1,165,000	7	80	1865		
do do										4th 3d Ex.	1,154,000	7	64			
Cleveland and Toledo.....	Ohio.	47	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mort. Jun. 1st Div.	359,000	7	65	1867		
do do										1st " " 2d Div.	263,000	7	65	1872		
do do										2d " " "	265,000	7		1862		
do do										1st " Tol. Nor. & Clev	521,000	7	75	1863		
do do										2d " " "	293,000	7	75	1864		
do do										Junction Income.	44,300	7		1862		
do do										C. & T. Income.	300,000	7		1864		
Cleveland, Columbus and Cincinnati.	Ohio.	123	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage	519,000	7		1864 & 1890		
Cleveland, Painesville and Ashtabula..	"	125	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage	560,000	7	99	1861		
do do										2d "	303,000	7		1862		
Columbus and Xenia.....	Ohio.	105	54	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	274,700		92	1860 to 1866		
Columbus, Piqua and Indiana.....	"		103	143	In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage	300,000	8			
Dayton and Michigan.....	"									2d "	2,212,000	8				
Dayton and Western.....	Ohio.		38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage	300,000	7	50			
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage	2,500,000	7		1875		
do do										2d "	1,000,000	8		1866		
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report												
Dubuque, Marion and Western.....	"	51		No report												
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage	757,734					
Evansville and Crawfordsville.....	Ind.	132		966,061	1,219,100	249,688	124,140			2d "	18,000					
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage	400,000					
do do										2d "	1,993,000					
Galena and Chicago Union.....	Ills.	78	121	6,028,300	3,524,200	none	1,462,732	652,260	Dec. 31, 1860.	1st Mortgage	1,520,000		105	1862 & 1863		
do do										2d "	1,320,000		100	May 1, 1875		
Great Western	Ills.		175	1,600,000	2,391,000		455,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10	7			
do do										1st " E. D.	1,350,000	7				
Green Bay, Milwaukee and Chicago...	Wis.		84	400,000	No report	75,000	63,141	13,573		Land Mortgage	5,000,000	26				
Greenville and Miami.....	Mo.		32	300,000	473,000					Mortgage Conv.	1,354,000	30				
Hannibal and St. Joseph.....	Mo.	206		1,041,000	10,354,000	220,336	996,907	512,933	Sept. 1, 1860.	1st Mortgage	927,000	6	99	1873		
do do										2d "	4,000,000	7	108	1869 & 1870		
Hartford and New Haven.....	Conn.		62	2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage	2,000,000	7	06	1870		
Hudson River	N. Y.	45	144	3,738,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	2d "	1,840,000	7	93	1875		
do do										3d "	28,000	7	64	1868		
Illinois Central.....	Ills.	58	455	15,654,900	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional Construction	12,885,000	7	92	1875		
do do										"	4,115,000	6	96	1875		
do do										Debentures	42,740	7				
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage	600,000	7				
do do										2d "	578,000	10				
do do										Income.	38,700	10				
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage	500,000	7	55	1866		
do do										2d "	400,000	7	85			
do do										Real Estate Mort.	200,000	7				
Indianapolis, Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,284	9,936	277,932	36,773	Dec. 31, 1860.	1st Mortgage	649,954	7	68			
do do										2d "	314,000					
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report									
Iron.....	Ohio.		13	118,865	50,000		No report									

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Term.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Pa. as
Iron Mountain.....	Mo.		86½	\$ 1,970,337	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st	299,000	7	75	1861	
do										2d	392,000	7	70	1873	
Kentucky Central (Covington and Lexington).....	Ky.		99	Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st	260,000	7			
do										2d " Conv.	1,000,000	7			
do										3d	600,000	7			
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiver.						1st Mortgage E. D.	903,000				
do										2d " E. D.	1,000,000		89		
do										1st Land Grant W D	4,000,000				
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report			1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.		29	514,433	130,000		108,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883	
Little Miami.....	Ohio.	100	63				1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000	6			
Louisville and Frankfort.....	Ky.		63	1,169.59	354,519		245,910	98,679	June 30, 1861	1st Mortgage.....	248,000				
do										1st Mortgage.....	2,000,000	7			
Louisville and Nashville.....	Ky.		268	5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago.....	Ind.		288	2,800,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.		87	1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.		303	8,561,213	196,468	103,150	430,649	78,500	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868	
do										2d "	2,000,000	7			
do										3d	1,500,000	7			
do										Sterling Income.....	333,000	4			
Michigan Central.....	Mich.		59	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	Domestic	928,817	6	92½	1872	
do										1st Mortg. Sterling	467,483	6	84	1869	
do										1st " Conv.	500,000	8	86	1860	
do										1st " unconv.	250,000	8	96	1869	
do										1st " Dollar Conv.	2,598,000	8	104½	1869	
Michigan South'n & North'n Indiana	Mich &		55½	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	1st " S. F. Conv.	4,153,000	8	106½	1882	
do										Mort. Mich. So.	991,000		99	1860	
do										" Nor. Ind.	985,000		103	1861	
do										" Goshen Line.	1,168,000		100½	1868	
do										S. F. Toledo	2,850,000			1885	
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	150,456	82,182		2d Mortgage	2,465,000		4½	1877	
do										1st Mortgage.....	400,000	8			
Milwaukee and Horicon.....	Wis.		42	1,101,200						2d	200,000	7			
do										1st Mortgage.....	420,000	8			
Milwaukee and Prairie du Chien.....	Wis.	27½	192	4,944,000	2,556,000		683,186	439,943	Dec. 31, 1860.	2d	600,000	8			
Milwaukee and Western.....	Wis.		71	No report						1st Mortgage.....	2,556,000	7	99	1891	
Mississippi and Missouri.....	Iowa,		55	No report						2d					
do										1st Mortgage Conv.	1,000,000	7			
do										2d " S. F.	400,000	8			
New Jersey.....	N. J.	13	34	4,397,600	688,000		992,767	579,981	Dec. 31, 1861.	Oskaloosa Div.	1,425,000	7			
New Jersey Central.....	N. J.		64	2,210,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	Land Grant.....	7,000,000	7			
New York and Erie Pref.....	N. Y.	62		Sold under mortgage			5,590,916	1,979,402	Sept. 30, 1860.	Mortgage.....	711,000		102½		
do		34								1st Mortgage.....	3,000,000		05		
do										2d	4,000,000		104		
do										3d	6,000,000		92½		
do										4th	4,900,000		86		
do										5th	1,792,500		82½		
New York and Harlem Prof.....	Conn.	44	138	5,717,190	6,035,752	.....	1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	105½	1873	
do		15								2d	1,000,000	7	101	1864	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	7	94	Dec. 1, 1866	
do											978,000	6		Oct. 1, 1875	
New York Central.....	N. Y.	92½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.	7,925,000	6	101	May 1, 1863	
do										Mortgage.....	3,000,000	7	106½	June 15, 1864	
North Central.....	Md.		138	2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,060,500	6		1885	
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6			
Ohio and Mississippi, Eastern Div.....	Ohio & Ind		192	Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6			
do										3d	316,995				
do										Construction.....	4,637,920				
do										Income.....	3,591,185				
Ohio and Mississippi, Western Div.....	Ills.		148	.....	3,292,403		No report			State Loan.....	7,000,000	6			
Pacific.....	Mo.			3,199,662	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	" " S. W.....	2,800,000	6			
do										Construction.....	4,500,000	6			
Pennsylvania.....	Pa.		359	13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,900,000	6	104½	1888	
do										2d	2,319,000	6	98½	1875	
do										2d " Sterling.	1,957,440	6		1875	
do										State Works.....	7,200,000	5	89		
Peru and Indianapolis.....	Ind.		74	1,100,000	820,000	80,000	No report			1st Mortgage.....	2,300,000	6	99½	1844	
Philadelphia, Wil. and Baltimore.....	Del.		98	5,600,000	2,310,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863	
do										1st Mort. O. & P ..	1,000,000	7	92	1865	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	2d	750,000	7	77	1866	
do										1st " O. & L.....	1,000,000	7		1872	
do										2d	380,000	7		1873	
Pittsburgh and Connellsville.....	Pa.		49	1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000				
Racine and Mississippi.....	Wis.		104	2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.						
Sandusky, Dayton and Cincinnati ..	Ohio.		170	2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856	
do										"	997,000	7		1866	
do										"	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.		125	848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886	
Springfield Mt. Vernon & Pittsburgh..	Ohio.		56	408,975	500,000	100,000	110,200	53,100							
do			50	1,000,000	1,050,000	200,000				1st Mortgage.....	500,000				
do										2d	450,000				
Stuebenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d	900,000	7		1865	
do										1st Mortgage Conv.	1,000,000	7	110	1862	
do										2d " Conv.	2,000,000	7	80	1868 & 1870	
do										1st " Bel. & Ill.	517,000	7		1873	
Terre Haute and Richmond.....	Ind.		100	73	1,381,450	230,000	none.	377,692	Dec. 1, 1861.	1st Mortgage.....	230,000	7	92	1866	
do			54	243	2,123,500	5,996,049	52,389	433,545		1st Mortgage.....	3,400,000	7	59	Aug. 1, 1865	
do										2d	2,500,000	7		Nov. 1, 1878	
do										Mort. Coupons....	96,049	7		1860 to 1885	

advantages, therefore, of this cable may be summed up thus:—

1st. Its great flexibility, without elasticity or compressibility.

2d. In not being affected by heat or moisture.

3d. Its being imperishable in sea water.

4th. Its strength and perfect protection to the insulating medium. All such media being too tender to be exposed as outer coverings, from certain risk of puncture, abrasion, shifting from vessel to vessel, pressure on lower sheaves of the cable when coiled in the hold from the superincumbent weight, and injury from overheating.

5th. The silicated rind, having a complete natural security against the attacks of animalculæ.

6th. Its pliability in coiling, facility in paying out, and submerging in an even or horizontal line without kinking.

7th. The buoyancy and resilient properties of the cane rendering it less susceptible to friction and abrasion.

Finally, the inventor states that it can be manufactured at a price one third less than any other cable.

The following are stated to be the results of tests which have been applied to this cable:—

The cable when covered with cane alone—weight $\frac{3}{4}$ tons. Breaking strain, $2\frac{1}{2}$ to 3 tons. When combined with steel wire—weight not exceeding $1\frac{1}{2}$ ton. Breaking strain, from 4 to 5 tons.

When constructed in this latter manner, the sinking or dead weight of the steel wire is compensated for by the floating power of the cane, and the cable would descend in a horizontal position to the ocean bed slowly and without strain, and capable of spanning any sub-oceanic valley three or four miles in width, without risk of breaking.

Diameter, in every instance, within an inch.—*Jour. Soc. of Arts.*

COQUIMBO RAILWAY.

This railway, which bids fair to eventually become one of the most profitable and useful in the Republic of Chile, South America, was solemnly inaugurated on the 21st of April, 1861, with all the ceremonies usually observed in Catholic countries. Its length, including two branches, is about forty and a half English miles, and the object of its construction is not only to connect the city of Serena, the capital of the province, with its spacious and well sheltered Port Coquimbo, eight miles distance, but to facilitate the conveyance of the mineral riches from the districts lying to the south of the latter.

The line forms a letter V and commencing upon the coast of the Pacific at the port of Coquimbo, it thence runs for eight miles in a northeasterly direction to the city of Serena, beyond which place it is continued for two and a quarter miles, as far as the large copper smelting works of the Compania Lambert, where it terminates for the present, on this side of Coquimbo, the intention, however, being to extend it ultimately up the rich and fertile valley of Elgin to the town of Vienna, about forty miles further.

From Coquimbo, southwards, the railway runs for twenty-eight and a half miles, passing first in its course the extensive smelting works of Don Jose Tomas Urmeneta, at Guayacan, where twenty-four reverberating furnaces are constantly at work, and to these works a branch has been formed nearly two miles in length. Beyond this, after travers-

ing a distance of eighteen miles from Coquimbo, the great mineral districts of Andacollo and Tambillos are reached, and thence to the present termination of the railway at the foot of the Cardas range of mountains. The entire country is rich in copper and other minerals.

This line is intended to be continued thirty miles further to Ovalle, the chief town of a department containing immense resources, both mineral and agricultural. Within this province is situated the wonderful copper mines of Tamaya, which probably are the most productive in the world, the chief of which belongs to the proprietor of the large smelting works at Guayacan, already mentioned. To the foot of the mountain of Tamaya the railway has already been surveyed, and although the line will be somewhat difficult, yet there exists no serious obstacle to its execution, and the arrangements are being already made to raise the additional capital required.

The Coquimbo Railway is the first line in Chile yet made exclusively with capital raised in the country; it has cost, including rolling stock, stations, land, and every other expense, £5,680 per mile, or £230,000 for the entire length of forty and a half miles, and the estimated expense of continuing it to Ovalle is £250,000.

The works upon the line are of a simple though durable character; a kind of calcareous limestone found in the district has been employed in the construction of the various bridge abutments and in culverts; and cast iron piles, with wrought iron girders, have been generally adopted for the principal bridges, one of which, over the Coquimbo river, is 500 ft. in length.

The gauge adopted is that of the remainder of the lines of Central Chile, viz., 5 ft. 6 in., the rails being 61 lb. per lineal yard.

The curves of the main lines in no case exceed 1,000 ft. radius, and the steepest gradient is 1 in 70.

The Coquimbo Railway is the cheapest yet made in Chile. It has been carried out for an amount considerably below the estimate, and the execution of the works has occupied only sixteen months.

IMPORTANT PATENT SUIT CASE.

The patent case which has been on trial in the United States Court for some two weeks past terminated yesterday, by a verdict in favor of the defendant, the Michigan Southern and Northern Indiana Railroad Company. The case has been of much interest, not only to these immediate parties and those interested directly in the question decided, but to the legal fraternity generally, involving, as it did, a branch of practice seldom appearing in the courts in this State.

The suit was brought by Henry H. Turrill and Charles Wormley, as assignees of Joseph D. Cawood, for an alleged infringement, by the defendant, of a patent granted to Cawood for a new and useful improvement on the common anvil or swage-block, for the purpose of welding up and re-forming railroad rails when they have become exfoliated or shattered from unequal wear.

The machine, as improved, consisted of a solid block of iron having a raised stationary jaw or press-block with a face fitted to the side of a "T" rail. Directly facing this block another press-block was placed upon the anvil, but so arranged as to move up toward the stationary jaw, and hold firmly a railroad rail, while being repaired. Its merit consisted principally in the increased facility

which it offered for repairing a rail at one heat, and in preventing the rail from being stretched or crooked during the process. The patentee claimed, as his invention, the stationary jaw and heavy block in combination with the movable press block or jaw, and disclaimed the anvil block. The defendants claimed that the invention—or at least so much of it as was in use upon their road—was not new, but had been in use for a long time prior to the Cawood patent. A very large amount of testimony was introduced upon both sides, some of which was very interesting, in a mechanical point of view; as experts were sworn who testified, at considerable length, concerning the state of the art at, and prior to, the time when the patent was granted to Cawood. Many ingeniously made models were also exhibited in court as involving, in whole or in part, the patented features of the defendants machine, among which was a very neat contrivance for forming the tubes of bayonets, as also two models of English swaging machines intended to be wrought by steam. It was not disputed under the evidence that the principle of the Cawood patent had been in use prior to Cawood's invention, but the plaintiff contended that the combination of the movable and stationary blocks with the anvil, was new and patentable. The court instructed the jury that, under his construction of the claim in the specification, in connection with the facts as admitted, the stationary and movable jaws were known before the application for a patent, and thereupon the jury rendered a verdict in favor of the defendants as above stated.

The case was ably managed on the part of the plaintiff by D. C. Holbrook, Esq., of this city, and Henry B. Northrop Esq., of Sandy Hill, New York; for the defense by Messrs. Cozzens and John Cochrane Esq., of New York, and Hon. Warner Wing and H. H. Emmons, Esq., of this city.—*Detroit Free Press.*

MONETARY AND COMMERCIAL.

As noted in our last the prominent feature in the money market still continues to be the high price of gold and silver. It seems that the low prices of stocks and the high rates of foreign exchange have in some measure stopped the rush of securities to our market. During the week gold fell down to 14 and silver to 8 per cent. premium. It has fluctuated somewhat and now may be quoted at 112 to 114 buying and 116 to 116 $\frac{1}{2}$ as the outside rate and 115 as the regular price.

The New York Tribune of the 28th says:

The business in gold has not been large during the day, and the inflated speculation of the last few weeks appears to have been pricked. After the Board, the market was sold down to 116 $\frac{1}{2}$ at which it closed with but little doing. Silver is 110 to 112 and dull. Dutiable Demand Treasury Notes are unsettled, and the quotation ranges from 106 to 105 $\frac{1}{2}$. There was a large order in the market for Indebtedness Certificates, which have attracted attention as paying a better interest than any other Government security. And they have advanced to 98 $\frac{3}{4}$, while other Federal securities are lower. The 7. 30s are quiet at 102 $\frac{3}{4}$ to 103.

Money shows increasing ease, and favorite borrowers on choice securities supply their wants at 4 per cent. The current rates, however, are 5 to 6 per cent.

The following are the exports of specie from New York for this year and several past ones.

Exports of specie from New York to foreign ports for the week ending July 26th, 1862:

July 26th—Steamship City of New York for Liverpool:	
American gold coin.....	\$347,000
Sovereigns.....	175,413
Gold bars.....	48,804
English gold and silver.....	20,060
American gold and silver.....	24,500
July 26th—Steamship Great Eastern for Liverpool:	
Specie.....	100,000
July 26th—Steamship Borussia, for Hamburg:	
Mixed silver.....	10,100
Specie.....	13,030
California Gold bars.....	104,000
American gold coin.....	46,900
Total for the week.....	\$1,384,337
Previously reported.....	31,894,350

Total since Jan. 1st 1862.....	\$36,278,847
Same time in 1861.....	3,238,976
" " 1860.....	27,087,294
" " 1859.....	43,152,697
" " 1858.....	33,034,978
" " 1857.....	55,074,186
" " 1856.....	20,453,334
" " 1855.....	19,947,308
" " 1854.....	18,889,924
" " 1853.....	12,556,140
" " 1852.....	11,814,958

General business at the West has been very good for the season, and money is easy at low rates. Short date paper first class 6 to 7 per cent. Longer date 8 to 10 per cent.

Crops are good as far as harvested, and a bright prospect for the balance.

An important decision was made at Chicago on Thursday last in relation to the receipt of United States Treasury notes for county and town taxes. On the 11th of July, a tax-payer of Cook county, Illinois, tendered to the county Treasurer gold to the amount of \$150 in payment of State taxes, and Treasury notes to the amount of \$210 for county and town taxes. The Treasurer declined to receive the latter, and brought an action to recover the amount in court. The State Attorney, in presenting the case remarked:

I have come to the conclusion that the law of February, 1862, makes the issues under that law a legal tender for all debts that are due for county and town taxes. I do not think it can operate as an ex post facto law, or that it can abrogate a law already in existence; for instance: no court would hold that, if a State had said the State taxes should be paid in gold, these taxes should now be paid in Treasury notes. With the exception of State taxes, and State school taxes, it seems to me, then, that the Treasury notes ought to be received for the balance of taxes. That is my opinion.

The presiding Judge decided as follows:

The Constitution of the United States gives to Congress the power to coin money and regulate the value thereof, and provides that no State shall coin money, emit bills of credit, or make any thing but gold and silver coin a legal tender in payment of debts.

But it is said that the State law requires that these taxes should be paid in gold and silver. This law was valid when passed, being in perfect accordance with the laws of Congress, which then recognized a metal currency alone as a legal tender, and only affirmed what the law was before the passage of the act. It is granted that the power to regulate the currency is not exclusive in Congress, but may be exercised within certain limitations by the States, yet it must be so exercised as not to conflict with any existing law of Congress upon the subject.

This principle has been fully established by decisions upon a similar clause of the Constitution, giving Congress power to establish uniform laws on the subject of bankruptcies. [See Sturges agt. Crownshields, 4th Wheaton, 1; 2d Kent, 390.]

The Supreme Court of the United States, in discussing the conflicting powers of the General and State Governments, make use of following language:

"If any one proposition could command the universal assent of mankind we might expect it would be this—that the Government of the Union, though limited in its powers, is supreme within its sphere of action."

This would seem to result, necessarily, from its nature:

"It is the Government of all, its powers are delegated by all, it represents all, and acts for all."

Though any one State may be willing to control its operation, no State is willing to allow others to control them. The nation, on those subjects on which it can act, must necessarily bind its component parts.

But this question is not left to mere reason. The people have in express terms decided it by saying, "This Constitution, and the laws of the United States, which shall be made in pursuance thereof, shall be the supreme law of the land, and by requiring that the members of the State Legislatures and the officers of the Executive and Judicial departments of the States shall take the oath of fidelity of it. The Government of the United States, then, though limited in its powers as supreme; and its laws, when made in pursuance of the Constitution, form the supreme law of the land, anything in the Constitution or laws of any State to the contrary notwithstanding." (4th Wheaton, 316.)

If it is once admitted that Congress had the power, under the Constitution, to pass the law making Treasury notes legal tender and lawful money, then there can be no doubt that the law of any State, and the decision of any State Court, making or deciding that gold or silver alone shall be received for any debt, county tax, or moneyed demand, is void and of no effect as against the law of Congress.

But it is intimated that the Supreme Court has decided the question, and therefore is not open for examination. The decision was ren-

dered upon a special case, involving only taxes due the State, and not county or town taxes.

If a State has the right to make a law that Treasury notes shall not be received for county or town taxes, then it has a right to provide that they shall not be received in payment of judgments, and thus completely defeat the power of Congress.

I am of the opinion that Congress had the power, under the Constitution of the United States, to make Treasury notes a legal tender for all debts and moneyed demands within United States, and that they are a legal currency for the payment of all county and town taxes, and that any act of the Legislature, or decision of any Court to the contrary would be in conflict with the powers of Congress.

The United States Court in the case of McCullough vs. the State of Maryland (4th Wheaton) say that the State have no power to retard, impose burdens, or in any manner control, the operations of the Constitutional laws enacted by Congress to carry into execution the powers vested in the General Government.

The tender in this case being legal, judgment is refused against the lands and lots described in the objections of said Farwell.

—There are two or three hundred men at work on the extension of the Chicago and North-Western Road. It is expected that the iron will be down so as to admit the running of trains into Green Bay about the middle of October.

—The Buffalo, New York and Erie Railroad earnings for 21 days in July were:

1862.....	\$39,054 44
1861.....	29,112 64
Increase in 1862.....	\$9,941 30

—The Chicago and Rock Island Railroad Company earned the third week of July:

1862.....	\$29,861
1861.....	24,795
Increase in 1862.....	\$5,066

—The earnings of the St. Louis, Alton and Chicago Railroad from July 16 to July 22, inclusive, were:

	1862	1861.
Passengers.....	\$1,726 35	5,157 02
Freight.....	13,352 65	14,399 23
Freight.....	855 72	855 83
Total.....	\$21,964 16	20,412 08

Increase in 1862.....	1,552 68
Total this month to date.....	63,533 27
Total since 1st of January.....	352,470 70

—The Michigan Central Railroad earned the third week in July:

1862.....	\$35,024
1861.....	24,829
Increase in 1862.....	\$10,195

—The Milwaukee and Prairie du Chien Railway shows a decrease in its earnings for the third week in July:

Third week, 1862.....	\$22,030 60
Third week, 1861.....	25,140 30
Decrease.....	\$3,109 70

LITTLE MIAMI R. R.—This road has been doing a very heavy freight business for some time past, almost unprecedented at this season of the year. It calls into requisition the full capacity of the road in rolling stock and employees.

NEW GUN-METAL.—The cannons newly cast in Austria for the marine service, and from which so much is expected, are formed from a new alloy called *Aich* metal from the name of the inventor. It is composed of copper 600 parts; zinc, 382; iron, 18. Its tenacity is said to be excessive; it is easily forged and bored; when cold it may be bent considerably without breaking; its resistance is far greater than that of iron of the best quality.

This announcement makes us earnestly wish to learn the fate of the cannon of aluminium-bronze, which M. Christophe cast at his own expense, and which was so severely tried at Vincennes.—*Cosmos*

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OF THE

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OF ALL THE RAILROADS IN THE

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Passenger Trains leave C. H. and D. Depot, at 7:30 A. M., 3:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth street Depot.

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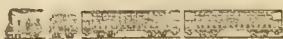
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SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M., Lafayette at 9:15 P. M., Springfield at 5:20 A. M., Quincy at 12:55 P. M., Palmyra at 2:15 P. M., St. Joseph at 12:30 A. M., Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M., Lafayette at 1:40 A. M., Chicago at 6:00 A. M., connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars. Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.

W. H. L. NOBLE,

General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

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ATTORNEY AT LAW,

OFFICE:

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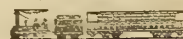
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SPEED, SECURITY AND COMFORT

Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.

J. H. SULLIVAN, Gen. Wes. Ag't, Baltimore, O.

I. M. COLR, Gen. Ticket Agent, Baltimore.

1861. 1861.
FAST TIME.
LITTLE MIAMI
AND
COLUMBUS AND XENIA
AND
CINCINNATI, HAMILTON & DAYTON
RAILROADS.

On and after SUNDAY, Nov. 10. 1861, Trains depart as follows:

7:30 A. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express.—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty. 7:40 A. M.—Morrow Accommodation.—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation.—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Richmond, Indianapolis and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation.—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express.—From Cincinnati, Hamilton and Dayton Depot.—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,

General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet Walnut & Vine
CINCINNATI O

W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

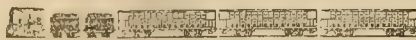
Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material. Orders respectfully solicited, with the assurance that pains will be spared to give entire satisfaction to all.

1862. 1862.
Pennsylvania Central R. R.
285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
ONE TRAIN RUNS DAILY (430 MILES.)
VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
BOAT TICKETS GOOD ON ANY OF THE SOUND LINES
FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R. R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
D. A. STEWART, Freight Agent, Pittsburgh.
CLARKE & CO., Transfer Agents, Pittsburgh.
R. C. MELDRUM & CO., Madison, Indiana.
J. E. MOORE, Louisville, Ky.
W. W. AIKMAN & CO., Evansville, Ind.
R. F. SASS, St. Louis, Missouri.
CLARKE & CO., Chicago, Illinois.
W. H. & E. L. LANGLEY, Gallipolis, Ohio.
G. B. NEAL, Parkersburg, Virginia.
HALL & CO., Marietta, Ohio.
H. S. PIERCE & CO., Zanesville, Ohio.
McDOWELL & McCORM, Portsmouth, Ohio.
R. McNEELY, Maysville, Ky.
J. P. JOHNSTON, Ripley, Ohio.
JOHN TODD, Covington, Ky.
G. L. HEATON, Cleveland, Ohio.
R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well lighted and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other. ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
L. L. HOUPP, Gen'l Ticket Agent, Philadelphia.
H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:30 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day, Toledo & Day, Huntsville.....	5:20 P. M.	10:10 A. M.
Cin. & Chicago Air-Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Terre Haute and Lafayette and Chicago Mail.....	5:05 A. M.	11:40 A. M.
Indianapolis and Chicago Night Express.....	3:20 P. M.	11:50 P. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

ns run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
u sville and St. Louis Mail.....	5:00 A. M.	10:35 P. M.
ymour Accommodation.....	3:00 P. M.	8:45 A. M.
uisville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.
P. W. STRADER,
General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

W. H. L. NOBLE,
General Ticket Agent Indianapolis & Cincinnati Railroad.
E. F. FULLER,
General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET

NEW YORK.

ALBERT BRIDGES.

JOEL C. LANE

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.
Tube CLEANERS, Steel Wire and Whalebone BRUSH-

Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enamelled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warm-
ing Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Pia-
za Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.
Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,
28 Platt Street, New York

N. W. BALDWIN, MATHEW BAIRD.

M. W. BALDWIN & CO. ENGINEER'S

BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring). Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned
THEODORE DEHON,
no1 10 Wal Broadway, New York

EDWIN J. HORNER,
SUCCESSOR TO

McDANIEL & HORNER,



LOCOMOTIVE & RAILROAD
CAR SPRING

MANUFACTURER,
WILMINGTON, : DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, low-priced FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE on both sides, impossible to unravel, and leaving no chain or ridge on the underside, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.
feb12. WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

-AND-

Corrugated Iron Roofs
ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Sot. 2. MOSELEY & CO.

JAMES FOSTER, Jr. & Co.,
MATHEMATICAL AND PHILOSOPHICAL INSTRUMENT MAKERS,
S.W. CORNER FIFTH AND RACE,

Cincinnati Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

H. TWITCHELL.

JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co. Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
Ag. 4, m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,
Engine and Car Axles, Pump and Piston Rods
Bar of all Sizes,
And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works
June 8.

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING
LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

-AND ALSO TO-

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay

JOHN ELLIS, President.
WALTER McQUEEN, Supt.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1½ to 10 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from ½ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—from ½ to 24 inch diameter, and branches for same, &c.,

Gas Works Castings, etc., &c.

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER,
THOS. T. TASKER, JR., S. P. M. TASKER,
HY. G. MORRIS.

BUTLER'S

MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroad offices for the South and West. For sale by 1,000 leading Stationers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON.

Editors

CINCINNATI:

THURSDAY, AUGUST 7, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

the space occupied by ten lines of Nonpareil—	
square, single insertion.....	\$1 00
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
column, single insertion.....	5 00
“ “ per month.....	10 00
“ “ six months.....	40 00
“ “ per annum.....	80 00
page, single insertion.....	15 00
“ “ per month.....	25 00
“ “ six months.....	110 00
“ “ per annum.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.

Cincinnati, Hamilton & Dayton—

Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	10.10 A. M.

Dayton, Lima, Toledo & Huntsville—

Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.10 A. M.

Sandusky, Dayton & Cincinnati—

Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.10 A. M.

Marietta & Cincinnati—

Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.40 A. M.

Ohio & Mississippi—

Mail.....	5.05 A. M.	10.05 P. M.
Seymour Accommodation.....	3.00 P. M.	8.45 A. M.
Express.....	5.00 P. M.	6.53 A. M.

Indianapolis & Cincinnati—

Mail.....	5.05 A. M.	11.10 A. M.
Chicago Express.....	3.20 P. M.	11.50 P. M.

Dayton & Michigan—

Toledo, Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.

Cincinnati & Chicago Air Line—

Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.

Cincinnati, Wilmington and Zanesville—

Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.

Kentucky Central— (City time.)

First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami, Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

RAILROADS OF PENNSYLVANIA.

We have already given the details of construction of the railroads of Pennsylvania as shown in the State reports. Of the whole number of roads reported 40, 25 carried a total of 5,925,501 passengers of all classes during the year. The largest number carried on one road was 1,668,599 passengers on the Philadelphia, Germantown and Norristown Railroad. The next largest was 1,017,391 passengers carried on the Pennsylvania Railroad. And next to this was 524,863 passengers on the Pittsburgh, Ft. Wayne and Chicago Railroad. On 25 roads the total number of tons of freight transported was 12,276,537. Of this amount the heaviest freight business was done by the Philadelphia and Reading Railroad, 2,115,151 tons. The next heaviest was on the Pennsylvania Railroad, 1,547,781 tons. Next was the Mine Hill and Schuylkill Haven Railroad, 1,526,909. And next again was the Delaware, Lackawanna and Western Railroad, 1,285,962 tons, and the Lehigh Valley, 1,176,745 tons. The total movement of freight or the number of tons carried one mile is given for only 16 roads, 526,344,839. Of these the Pennsylvania Railroad had the largest, 236,840,700, and the Pittsburgh Fort Wayne and Chicago next, 106,386,532 tons. The character of the business done on these roads is plainly indicated in these tables. While on many of the roads the number of tons of freight transported corresponds very nearly with the number of passengers, as for example, the Pennsylvania Railroad, which carried 1,547,781 tons of freight and 1,017,391 passengers and the Pittsburgh, Fort Wayne and Chicago Railroad carried 515,061 tons of freight and 524,863, on many others there is a great disparity between the movement of freight and passengers. For example, the Delaware, Lackawanna and Western Railroad carried 1,285,962 tons of freight and 76,457 passengers. The Lehigh Valley Railroad carried 1,176,745 tons of freight and 181,308 passengers. The Philadelphia and Reading Railroad carried 2,115,151 tons of freight and 345,885 passengers. On the other hand the Philadelphia and Trenton Railroad carried 318,787 passengers and only 344 tons of freight, and the Philadelphia, Germantown and Western Railroad carried 1,668,599 passengers and only 89,410 tons of freight. The Philadelphia and Trenton Railroad is a part of the line between two great seaboard cities each of which is the stopping and starting point of a vast amount of freight over the lines leading into the interior, while the lines on which freight largely predominates are roads leading from mining regions where the movement of passengers is small, and that of freight is necessarily very heavy in the product of the mines. And those on which freight and passengers nearly balance are ones doing a general business.

The average rates of speed adopted on passenger trains differs very widely on different roads. The Pennsylvania Railroad has adopted for ordinary passengers 24 miles per hour including stops, and 30 miles per hour in motion, for express trains 27 miles per hour including stops, and 29 miles per hour in motion. The Pittsburgh, Fort Wayne and Chicago Railroad runs ordinary passenger trains 24 miles per hour including stops, and 30 miles an hour in motion, express trains 28 miles per hour including stops and 33 miles per hour in motion. The Philadelphia and Reading Railroad runs ordinary passenger trains 24 miles per hour including stops and 28 miles per hour in motion, express trains 28 miles per hour including stops. The highest rate of speed is on the Cleveland, Painesville and Ashtabula Railroad which runs ordinary trains 28 miles per hour including stops and 35 miles per hour in motion, express trains 32 miles per hour including stops and 36 miles per hour in motion. The lowest rate of speed is on the Lykens Valley Railroad on which trains run 8 miles per hour. There are a number of other roads which run 12, 15 and 20 miles per hour. The roads adopting very low rates of speed are mostly coal roads.

The rate of speed adopted on freight trains varies from 8 to 12 miles per hour including stops. The Pennsylvania Railroad runs 12 miles per hour including stops and 12½ miles per hour in motion. The Philadelphia Railroad runs 8 miles per hour including stops and 14 miles per hour in motion.

In the table of classification of freight 31 roads are represented which carried during the year 14,030,565 tons of freight. Of this amount 7,142,869 tons were coal which is more than half the amount of all the freight carried on all the roads of the State during the year. Of the balance 2,187,350 tons were iron in its various stages, 254,260 tons were products of the forest, 466,426 tons were animals, 453,049 tons were vegetable food, 181,801 tons were other agricultural products, 292,587 tons were manufactured articles and 663,619 tons were merchandise.

In the table of earnings and cash receipts and payments 32 roads are represented. The total earnings for the year were \$19,976,655 21. The total expenses were \$8,954,508-95. This is a little less than 45 per cent as an average of the expenses to the receipts, a very low average, and showing that the roads are managed economically. The Pennsylvania Railroad earned \$6,543,720 47 at an expense of \$2,397,846 97. The Philadelphia and Reading Railroad earned \$2,905,838 73 at an expense of \$905,716 96. The Pittsburgh, Fort Wayne and Chicago Railroad earned \$2,848,297 90 at an expense of \$1,774,060 09. The Delaware, Lackawanna and Western Railroad earned \$1,501,501 58 at an expense of \$891,483 64. The expenses were allotted as follows:

Maintaining the road or real estate of the corporations.....	\$2,289,707 72
Repairs of machinery.....	2,100,767 73
Operating the roads.....	4,535,901 79
Total.....	\$8,926,376 24

The table of accidents on the railroads for the year shows 6 passengers killed and 13 injured. As there were 5,925,501 passengers transported during the year, this is at the rate of about one passenger killed to every million passengers transported and one passenger injured to every 450,000 passengers transported. Nervous people who fear railroads on account of accidents may derive some comfort from these figures. It is very certain that there is no other means of locomotion on which so few accidents occur. Of the employees 54 were killed and 41 were injured. And of the persons 58 were killed and 34 injured, making in all 118 killed and 88 injured.

BOUNTY FOR VOLUNTEERS.—The Cincinnati, Hamilton & Dayton Railroad Co. have voted an appropriation of three thousand dollars to the fund for paying bounty to Volunteers in the army. This is very liberal for the road of the length and resources of the Cincinnati, Hamilton & Dayton Railroad. Should all the roads which are solvent give according to their ability, a very large fund would be raised for this purpose.

We notice that the Pennsylvania Railroad has appropriated fifty thousand dollars for the same purpose. This is very handsome.

The Little Miami Railroad Company, of this city, in connection with its employees, has subscribed to the bounty fund \$10,500.

Who will follow next?

PACIFIC RAILROAD OF MISSOURI—SOUTHWEST BRANCH.—We notice in our daily contemporaries that work is progressing on this road under the General Government. The *St. Louis Republican* says:—"We are gratified to learn, as we do, from information communicated from George R. Taylor, Esq., President of the Pacific Railroad, that work will be resumed on the southwest branch of that road, along the whole line between Rolla and Lebanon, a distance of 56 miles. The work will be carried on in pursuance of an order of the President of the United States, under authority of the act which empowers him to direct that certain railroads named therein shall be repaired and continued. The Secretary of War is charged with the execution of this order, and will no doubt immediately take steps to have it complied with in the most expeditious manner. By far the heaviest grades on the entire road from St. Louis to the southwestern angle of the State occur in the division between Rolla and Lebanon. These being surmounted, and the road finished to the last named point, the continuation of it to Springfield and thenceforward will be a comparatively easy matter. The road is one of great importance in military point of view, and it was a wise decision of the President to inter-

vene in its favor as he has seen fit to do. Of course the relief and benefit to the Company will be a very important matter. It operates as so much direct aid to the road, and will greatly assist, by leaving other means at command, to the completion both of the southwest branch and the main trunk to Kansas and its connection with a National Pacific Road."

NEW JERSEY RAILROAD & TRANSPORTATION CO.

We are indebted to Mr. Jackson, the superintendent of this road, for a copy of the annual report for 1861. We are the more pleased to lay this report before our readers, from the fact that the New Jersey R. R. & T. Co. is acknowledged by all to be one of the best managed companies in this country, and the experience of this road in various items of railroad economy can be made very useful to our readers and received as entirely reliable.

The report says:

Thirty years are to day completed since the organization of this company, and but few of those who were interested in its welfare at that time are now numbered among the living.

During the past year three of our Directors have been removed by death. It will not be expected here to speak fully on the great loss we have sustained; the resolutions of the board at the time, appended to this report, will in a degree show the appreciation in which they were held. It is proper to say that while each in his respective sphere faithfully watched over the interests of our corporation, yet much of the success which has attended it through all the changing scenes and depressing circumstances of the times, is due to the devotion and foresight of one who from its inception guided its affairs, and who, up to his latest moments, as long as his health would permit, was earnestly solicitous for the welfare and advancement of this work.

Our land heretofore enjoying all the blessings of peace and prosperity, has during the past year been torn by the most wicked and causeless rebellion that the world has ever witnessed. It is not, however, its moral aspect to which we would here refer, but to its effect on our company financially, which will more fully appear as we review our business operations for the year.

We are still enabled to report a continued exemption from any serious accident; nearly three millions of passengers, including commuters, having been transported over the road during the year, without loss of life or limb to any in the cars, making upwards of thirty-nine millions since our organization, to whom this same remarkable exemption from injury applies. It has been the first effort in the management of the road in the past and will always be in the future, to

secure the preservation from accident of all who entrust themselves to our care, relying on the same kind Providence which has hitherto shielded us.

FINANCIAL STATEMENT.

The comparative statistics for the last four years are as follows:

	1861.	1860.	1859.	1858.
Gross receipts.....	\$992,767 94	\$1,113,881 76	\$1,035,682 65	\$903,438 45
Expenses.....	415,758 23	443,161 05	382,072 17	349,370 73
Ratio of expenses to earnings.....	41 6-10 p. c.	39 1/2 p. c.	37 1/2 p. c.	38 1/2 p. c.
Net earnings.....	\$576,009 71	\$670,720 70	\$653,610 48	\$554,067 72
Dividends.....	\$100,000 00	\$74,000 00	\$74,000 00	\$62,450 00
Surplus.....	476,009 71	596,720 70	579,610 48	491,617 72
Number of passengers.....	2,363,568 4	2,783,181 13	2,501,734	2,101,902
Tons of freight.....	407,500	451,451	407,077	354,004
Miles run.....	487,804	522,751	477,071	398,754
Ratio of running expenses.....	84 6-10	81 7-10	80 1-10	87 1/2

This table shows that while previous to the breaking out of the civil war the receipts of our road were gradually increasing, yet we in common with others shared in the general depression caused by the rebellion.

The gross receipts were \$121,114 42 less (or eleven per cent.) than for the year previous, and the expenses were \$30, 374 83 less. (or 7 per cent.) showing a decrease in the net earnings of \$90,739 59.

The increase in the ratio of earnings to expenses this year over last is owing to the loss of a portion of our business by the withdrawal of connecting roads, (the New York and Erie and Hackensack) requiring both the road and ferry, the income from which was earned with a less proportionate increase of expense, thus proving that our road is capable of a much increased business, without a relative increase of expense; and also to the diminution of business on our own road; for although we carried about one-fifth less passengers, and one-seventh less tons of freight, the miles run for their accommodation were only one-fifteenth less.

In consequence of the payment of the balance (50 per cent.) due on the scrip stock in the early part of the year, and of the stock dividend (10 per cent.) apportioned in March 1861, both drawing dividends on the first of August, the amount required for dividends was increased \$64,770, and the tax on the capital paid the State of New Jersey was increased \$2,744 25.

The total amount paid to the State of New Jersey in tax, transit duty, interest and dividends for the year was \$46,190 89. Notwithstanding these greatly increased amounts—there was added to the profit and loss account, after the payment of two semi-annual dividends of five per cent. each, the surplus earnings the sum of \$61,102 72, being nearly 1½ per cent. on the capital, and making the whole amount of surplus earnings on the first of January last \$323,258 38.

The expenses per mile for 1861 were 84 6-10 cents, a fraction less than for 1860.

By reference to the statement of the Treasurer it will be seen that our prospects for this year are much improved, the amount received being \$18,154 31 in excess of last year, and a slight increase over that of the corresponding period of any previous year. In 1860 the receipts were \$270,762 25; in 1861, \$252,852 12; and in 1862, \$271,006 43. The expenses for the same period are slightly decreased as compared with last year.

On the first of May \$6,000 of the bonds of the Company maturing were paid and canceled by the Treasurer, reducing the funded debt that amount. The total funded debt of the Company is now \$682,000.

The office of the company in New York has been removed from the old location in Merchants Exchange (that building having been purchased by the Government,) to pleasantly situated rooms No. 2 Nassau street corner of Wall street.

OPERATIONS OF THE ROAD—TRANSPORTATION OF TROOPS.

The equipments and facilities of the road being sufficient to accommodate the diminished business, but few additional permanent improvements were commenced during the year. Aware that to secure the business, the facilities for properly performing it are necessary, every attention will be given to the maintaining efficient motive power, and sufficient cars to do the work required, and to the arrangement of the time table so as to accommodate the greater number.

We have now in use, or undergoing repairs, 22 locomotives, 85 passenger cars, and 151 freight and service cars. These are constantly being rebuilt and repaired, and additions are made to replace those that are worn out, or that may be required by increased business.

The Jersey City Locomotive Works are now building for the company a powerful anthracite coal burning engine, to be on the road during the present month, to be called "A. L. Dennis," after one of the Directors; and a contract is made with the same parties for another engine, if desired, to be placed on the road about the 1st of January. [See appendices D and E.]

So great has been the saving in the expense of fuel by the using of coal, as compared with wood, that it is the intention of the company in future to order only engines con-

suming coal, and as improvements have been made in the construction of coal burning engines, it is now deemed better to use anthracite coal, than the bituminous; thereby avoiding the unpleasant smell, inseparably connected with the latter, and also causing a considerable saving in the cost of upholstering and painting the cars which are very much injured by the soot from bituminous coal.

The shops at east Newark, from their convenience and the improved machinery with which they are fitted up, will considerably reduce the expense of keeping the cars in order.

The machine and smith shops still remain at Jersey City, their removal to East Newark, according to the recommendation of the stockholders, having been delayed on account of the unsettled state of affairs during the past year.

The general condition of the road is well maintained by relaying with new rails such portions of the line as are worn out by continued use, renewing the ties, ballasting with gravel—which is found to preserve the ties, and also to save the machinery, by lessening the shock, as compared with solid ground—and by a continual strengthening and reconstructing of the numerous bridges as required.

We have entered into an arrangement with the American Telegraph Company, which secures to this company the exclusive use of a wire with batteries at our stations; an additional security against accidents and of essential service in giving notice of delays on our own or connecting roads, so that extra engines may be dispatched to keep up the regularity of the trains, or in case of a break to supply the place of the disabled engine.

The ability of our road to perform a greater service than will probably be required of it for a long time to come has been fully tested by the promptness with which large bodies of troops and munitions of war have been transported on the shortest notice; sometimes as many as three thousand men, with long trains of baggage, have been taken in one day without materially interfering with our regular trains.

It is due to those traveling on the road to say that they have at all times evinced a willingness to be subjected to inconvenience in order that the requirements of government might be properly performed.

The impression that we have received a large profit from this service is erroneous. The business is done at a much increased cost, as the trains traverse the roads one way empty, are generally delayed a long time after orders to be in readiness are given, and the cars being always more or less injured, while the fare received for the same is only two-thirds of the regular fare for one way.

Our company, in common with its connections, have from the first tendered all our re-

sources to Government, at prices as low and in some instances lower than the tariff of rates adopted by Government and furnished to us.

In order to remove the impression conveyed by the late Secretary of War in his report to the President at the opening of the present Congress, that there was hesitation manifested to reduce the fare, on the part of the roads between Baltimore and New York, on the direct route, it is proper to say that the prices between New York and Baltimore have, with the exception of the first regiment carried, been according to the tariff for passengers as furnished by Government, and less than the tariff for freight. The prices were fixed three months before any rates were furnished us by Government.

Our resources, if all taken for the transportation of troops—our regular business being entirely suspended for the time—would enable us to transport 10,000 men over our road in one day, and, in connection with other roads under the control of the present companies between New York and Philadelphia, cars could be furnished to transport an army of 50,000 men with their equipments in twenty-four hours.

FERRY.

We have six ferry boats all in good order, for the names, age and condition of which you are respectfully referred to Appendix G.

MISCELLANEOUS.

The appeal from the decision of the United States Circuit Court in favor of this company in the Newark Bridge Case having resulted in the confirming of the same by the Supreme Court of the United States, the way is now clear for the erection of the bridge over the Passaic river at Commercial Dock, Newark, straightening the route at that point, as soon as the interest of the company and the public accommodation render it necessary.

The through travel between New York and Washington requiring quick time, may ere long necessitate this improvement, and with the contemplated arrangement at Philadelphia for the continuation of the cars leaving Jersey City by taking the whole train on board of a ferry boat, to run from Camden, to Washington street wharf, in Philadelphia, the time occupied in the journey between New York and Washington will be greatly diminished. Arrangements have also been made for the transfer of passengers and baggage to the east through the city of New York by Dodd's Express, and connected therewith is an office for the deposit of parcels, relieving the owner from incumbrances during the day at a small charge.

Justice would not be done if this report failed to recognize as an immediate cause of the success of our institution the devotion and vigilance of the agents, conductors and operatives in every department.

The policy of retaining in the employ all who continue faithful in the discharge of

their duties has linked them to the company with an attachment that induces them to exercise a watchfulness over their several departments not generally given to other than private affairs.

The following is the financial statement of the company for the year 1861,

Capital stock.....	\$4,397,800 00
Funded debt (including \$485,000 the cost of the property and privileges purchased of the Jersey Association).....	688,000 00
Profit and loss, being surplus earnings represented by the permanent improvements, property and cash stated below.....	\$349,084 55
Less amount paid for relaying road with new rails and other improvements.....	25,826 17
	\$333,258 38
Dividend 1st Jan. payable 1st Feb.	219,872 50
	543,130 88
	\$5,028,930 88

COST OF RAILROAD AND EQUIPMENTS.

For graduation and masonry, bridges, superstructure, iron, passenger and freight stations, buildings and fixtures, engineering, land and land damages.....	\$3,609,089 19
Locomotives, tenders and snow plows.....	165,175 09
Cars—passenger, freight and baggage.....	235,303 56

PROPERTY, VIZ:

Bridge, Ferry, Turnpike, and other stocks, Real estate, Ferry boats, Privileges and Fixtures, (including the property and privileges purchased of the Jersey Associates for \$485,000).....	\$1,249,621 07
Cash in hand and cash items receivable on demand.....	369,842 17
	1,619,463 24
	\$5,028,930 88

RECEIPTS AND EXPENSES FOR THE YEAR 1861.

RECEIPTS.

From passengers.....	\$714,305 75
" freight.....	81,097 31
" U. S. mail, rents, express, freight, and other sources.....	197,364 28
	\$992,767 34

EXPENSES.

Maintaining railroad, bridges and buildings.....	64,812 10
Repairs of locomotives, cars and machinery.....	49,412 49
Fuel—cost and labor in preparing Operating the road and transport-passengers and freight.....	70,400 85
Office expenses, salaries and contingencies.....	215,892 78
	12,268 01
	412,786 23
Interest on bonds.....	\$41,050 00
Transit duty on passengers and freight.....	16,669 14
Tax on capital stock.....	21,489 25
Dividends in cash, August and February.....	439,670 00
Profit and loss to surplus earnings.....	61,102 72
	\$579,981 11

The comparative economy of coal and wood is shown in the following extract from the report on locomotives:

The 15 wood-burning engines have used 12,189½ cords of wood at a cost, including transportation, of \$65,066 72 in running 353-488 miles, being at an expense of 18.4 cents per mile, while five coal-burners have cost for fuel \$16,486 50 in running 115,453 miles, or at the rate of 14.28 per mile, showing a saving in coal over wood of 4.12 cents per mile. This is less than the difference in the previous year, which was 7 cents per mile, but is accounted for by our using oak wood almost exclusively the last year, thus saving nearly 2 cents per mile, while an increased quantity of coal was used on our coal-burners from the use of coal not well adapted, rendered necessary in consequence of the almost entire interruption in the former supply from the Cumberland region.

THE PACIFIC R. R.—The meeting of those interested in the Pacific Railroad, under the recent act of Congress, is called for the first Tuesday in September next at Chicago. This will be one of the most important railroad meetings ever held on this continent, both in the magnitude of the work itself and the vast number of other interests connected with its construction. We presume all the prominent railroad men of the country will be present. We understand also that the entire boards of the American and United States Express Co's will be there.

DELAWARE, LACKAWANNA AND WESTERN R. R.

The length of the main line of this road from Great Bend to Delaware River is 113 miles. It has a gauge of 6 feet and connects with the Erie R. R. at Great Bend. In addition to its main line of 113 miles, the company have 6 miles double track and 37 miles of sidings and tracks to the mines. The road is laid with heavy T rail, a part 65 and a part 75 pounds to the yard. There are three tunnels on the line, one of 2,280 feet, one of 560 feet, and one of 700 feet. Seventy miles of road are ballasted with stone and gravel. The whole number of bridges on the line is 42, of which 28 are stone and 14 are wood.

The total amount of paid up capital stock, by the report of 1861, is \$5,288,782 50. The total funded debt by same is \$4,884,961 57, while by the previous year's report it was \$5,523,617 59. The total floating debt by present report is \$900,000 00, by the previous report it was \$539,213 24. It will thus be seen that while the floating debt has been considerably increased, the funded debt has been diminished by a large amount. We never regarded the item of floating debt very favorably, regarding it as a dangerous and costly mode of carrying the liabilities of a company. The average rate of interest on the funded debt of the company is 7 per cent.

The total cost of the road and equipment as reported is \$8,912,937 38. By the previous report it was \$8,678,399 54. As the road is 113 miles in length, the present cost is equal to \$78,875 per mile of road, which is among the highest in our system of roads. The high cost might be readily inferred from the country through which it passes. The charges upon the road may be summed up as follows:

Capital Stock.....	\$5,288,782 50
Funded Debt.....	4,884,961 57
Floating Debt.....	900,000 00

Total Liabilities.....11,073,744 07

Of this aggregate nearly one half is represented by stock.

The earnings of the year have been as follows:

EARNINGS FOR 1861.

Passengers.....	\$78,845 30
Freight.....	1,114,728 64
Other sources.....	7,927 64
Total.....	\$1,501,501 58

This is equal to \$13,277 per mile of road, certainly very much above the average earning of the country. It is also noticeable that nearly the whole of these large earnings were derived from freight and but a very small proportion from passengers. As this freight is mainly the products of the mines, it affords a much more sure and general business than merchandise and passengers.

The operating expenses have been as follows:

EXPENSES.

Repairs of road bed and railway including cost of iron.....	\$233,975 37
Repairs of buildings.....	14,547 59
Repairs of fences and gates.....	386 98
Taxes on real estate about.....	5,610 00

Total maintaining the road or real estate of the company.....	\$314,504 94
Repairs of engines and tenders.....	\$82,707 16
" passenger and baggage cars.....	4,384 60
" freight cars.....	11,666 48
" coal cars.....	98,576 80

Total repairs of machinery.....	\$197,535 73
Office expenses, stationery, etc.....	\$19,893 60
Agents and clerks.....	13,468 46
Labor, loading and unloading freight.....	3,220 82
Porters, watchmen and switch tenders.....	1,741 42
Wood and water station attendance.....	4,731 13
Conductors, baggage masters and brakemen.....	66,417 01
Engineermen and firemen.....	53,837 16
Fuel—cost and labor preparing for use.....	167,393 59
Oil and waste for engines and tenders.....	14,714 20
" freight cars.....	17,244 28
" passenger and baggage cars.....	493 66
Loss and damage of goods and baggage.....	2,557 13
Damage to property including damages by fire and cattle killed on road.....	545 76
General superintendence.....	4,439 59
Contingencies.....	7,950 16

Total operating expenses.....	\$379,438 67
Total expenses for year 1861.....	\$91,883 64
Interest paid during the year.....	410,000 00

By comparing the expenses with the gross receipts, it will be seen that the expenses, not including interest, amount to 59 per cent of the gross receipts, which is somewhat larger than on most well managed roads, but yet pays the road very well from the extent of the business.

During the year not a single passenger was killed or injured. Of the employees three were killed and five injured, and of other persons three were killed and one injured.

The following is the doing of the year in transportation:

Doings of the year in transportation and total miles run

Number of miles run by passenger trains.....	87,817
Number of miles run by freight trains.....	138,091
Number of miles run by coal trains.....	1,145,737
Number of passengers (all classes) carried in cars.....	76,457
Number of miles traveled by passengers, or number of passengers carried one mile.....	9,358,462
Number of tons of 2,000 pounds, of freight carried in cars.....	1,285,962
Total movement of freight, or number of tons carried one mile.....	72,376,007
Average rate of speed adopted by ordinary passenger trains (including stops) miles per hour.....	25
Rate of speed of same, when in motion.....	25
Average rate of speed adopted by freight trains (including stops).....	8
Rate of speed of same, when in mountain.....	15
Average weight in ton of passenger trains, exclusive of passengers and baggage.....	63 tons including engine.

The following are the officers of the Company:

Directors:—Leake Mills, John J. Phelps, William E. Dodge, Moses Taylor, Henry Young, Charles H. Marshall, Samuel L. Mitchell, Rufus R. Graves, Lowell Holbrook, S. B.

Crittenden, Samuel Wetmore, George Bulkley, New York; John I. Clair, Blairstown, N. J.; Christopher R. Robert, *President*, New York City; Andrew J. Odell, *Treas. and Secretary*, New York City; John Brisbin, *Superintendent*, Scranton, Pa.

MASSACHUSETTS RAILWAY DECISION.

Judge Hoar has given the opinion below, regarding the lien of a railway company for freight transported.

The plaintiffs were coal dealers in Abington, and had been accustomed to receive coal from Boston over the Old Colony and Fall River Railroad, paying the freight five and a quarter cents a hundred, with a deduction of twenty per cent., in consideration of the unloading of the coal from the cars at Abington, being done by the plaintiffs. Between July 1st and October 7th, 1857, the company transported for the plaintiffs from Boston to Abington five cargoes of coal, but no part of the wharfage at Boston or of the freight had been paid or offered by the plaintiffs to the company.

There were two places upon which the coal was unloaded, both of which were upon the land of the company. One of these was upon the west of their main track, just below the plaintiffs' store, and adjoining the plaintiffs' land, and was a bin made by laying boards upon the ground, so as to make the shoveling out of the coal easier, and planking up one end, the fence between the railroad and the plaintiffs' land forming the back of the bin; and the embankment for the track making the front of the bin. But one kind of coal was put in this enclosure, and by the coal breaking a piece of the back fence, between thirty and forty tons of coal had run over on the plaintiffs' land. The other bin was on a side track which ran out from the main track on the east side, and was similar to the first and was used to receive other kinds of coal. As the several cargoes arrived in the cars, the plaintiffs and their servants unloaded them into these bins, the cars being left on the main track, or switched off on to the side track for this purpose. From these bins the plaintiffs carried away coal to deliver to their customers in carts and wagons; half of the first cargo had been carried away before the second arrived; and the plaintiffs continued this course of selling and carrying away till Nov., 1857, when the plaintiffs having failed, the company forbade the plaintiffs from taking any more coal until the freight should be paid, and served upon them a notice "that they claimed a lien on the coal for the freight thereon, and would deliver the coal only upon payment of the freight;" and presented to them a bill for the freight and wharfage. The plaintiffs then brought an action against the company, and replevied the coal.

At the trial, held in the Supreme Court of Massachusetts, the presiding judge ruled that the evidence did not show that the defendants had so far parted with the possession of the coal as to have lost their lien for the freight, and a verdict was taken in favor of the defendants. It was then agreed that if the whole court should be of opinion that, upon the evidence, the plaintiffs could recover, the verdict should be set aside and a new trial ordered; otherwise the case should be sent to an assessor to determine the amount of damages, with such instructions as the court might direct. The following is the opinion of the

Appellate Court, sustaining the ruling of the court below, in favor of the defendants:

HOAR, J.—It is true that where there is evidence in a case, upon which it would be competent for a jury to find a verdict for a plaintiff, an instruction by the presiding judge to the jury at the trial, that they ought to return a verdict for the defendant would be erroneous. The sufficiency and the preponderance of the evidence are matters wholly within the province of the jury, except upon a motion for a new trial after verdict. But where the facts are undisputed, and the evidence, with all inferences which a jury can rightfully draw from it, does not as a matter of law have any tendency to establish a proposition which is essential to the maintenance of the plaintiffs' case, it is the duty of the judge to instruct the jury. In this case, the defendants having received upon their wharf and transported over their railroad the plaintiffs' coal, had a lien upon it for wharfage and carriage. Their right to retain it for their lien was indisputable, unless they had lost the lien by parting with the possession of the coal. The plaintiffs, to maintain their action of replevin, must show that they were entitled to the possession. To establish this, it was incumbent on them to prove a complete delivery of the coal, sufficient in law to terminate the carriers' lien. This was the fact which the jury must find upon competent evidence, or their verdict must be for the defendants. The jury, at the trial, were instructed that this fact was not proved; and the whole court are of that opinion. The evidence submitted to the jury was the testimony of a single witness, with certain admissions of the parties. There was no evidence that the plaintiffs had paid or tendered any part of the money due to the defendants, or were ready or offered to pay it, before they replevied the coal; nor of any agreement to give credit for it; nor that enough of each cargo did not remain to be ample security for the freight due upon that particular parcel. The plaintiffs, by the agreement of the parties, were to perform the labor of unloading the cars; but this being done upon the premises of the defendants, did not divest the possession. The jury had no evidence of any lease of the bins to the plaintiffs. There was nothing to show that the defendants might have used the bins for any other coal, or required the plaintiffs to unload the coal at some other place, at their pleasure. It was then material to consider what delivery of the coal would be effectual to determine the lien.

By the contract, no credit for the freight being stipulated, the delivery of the coal by the defendants, and the payment of the freight by the plaintiffs, were acts to be done at the same time. A delivery may be complete for one purpose and not for another. The cases cited by the plaintiffs' counsel to show what constitutes a complete delivery are all cases which decide either what delivery is sufficient to pass the property as between vendor and vendee, or what is sufficient to terminate the liability of a carrier. A delivery may be complete so far as either of those purposes is concerned, and yet be upon an implied condition as to payments; and upon failure to perform this condition, the right of possession of the party making the delivery will remain unimpaired. This is a familiar doctrine as between vendor and vendee. If a man purchases goods at a shop for cash, and they are handed to him, or put by the shopkeeper into his wagon, and he then refuses to pay for them, no doubt they may be taken back.

The same principle applies to the lien of a carrier. The right of a carrier to payment for

the carriage first exists when he has performed the contract on his part; and his lien would not be lost, were the delivery even much more unequivocal than that on which the plaintiffs here rely. Suppose the railroad company should allow a customer for whom they had brought a lot of flour to unload it from the cars on his wagon, and as he started with the load, should demand the freight, could it be supposed that they would have no right to retake the flour, if he should refuse to pay? But suppose, instead of one load, there should be a hundred barrels, and the first load should be allowed to go without payment, the rest being taken from the cars and put upon the platform in the freight house, the company knowing that enough was left to make them secure, and the demand should be made as the owner was about removing the last load, could this destroy the right to retain for the lien? Where two acts are to be done simultaneously, under a contract, the obligation to do each is independent upon the performance of the other, and each is done upon the implied condition that the other shall be done likewise. The plaintiffs in the absence of express agreement or regulation, might say that they would not pay their money until they received their goods; and the defendants that they would not deliver the goods until they received their money. If the goods were, as in this case, not capable of instantaneous delivery, it would be impossible to perform the contract unless one or the other should begin. And we think the one who begins loses none of his rights by so doing, in the absence of evidence that he has agreed to waive them.

As there was nothing in the case to show that enough of each cargo was not left to satisfy the lien for the freight of that cargo, and as the plaintiffs made no demand of any separate portion of the coal, and proved no readiness to pay any freight whatever, no question seems to arise as to the extent of the defendants' lien. But we think it clear for various reasons, that they had a lien on the whole, for the whole sum claimed. Although the different cargoes which were carried were perhaps at first so far distinct subjects of contract, that the defendants might have delivered and demanded the freight for one, before delivering another, and the plaintiffs might have demanded one without waiting for the arrival of the whole, yet we think the mingling them together, indiscriminately, in the bins, shows that the whole was regarded by the parties as a continuous carriage and delivery of an entire quantity. But if this were not so, and the defendants had a separate lien upon each cargo for its freight and wharfage, then, as the plaintiffs mingled the several parcels so that they could not be distinguished, they must be held to have extended the lien upon each to the whole quantity remaining. This principle is well settled in regard to two persons having the general ownership of two parcels of similar goods; and it seems equally applicable to a case where one of them has a special property.

According to the agreement at the trial, the case is to be sent to an assessor, with directions to assess as damages the whole sum due for freight and wharfage, with interest from the date of the writ, unless that agreement is now changed by the parties.—*American Railway Review*.

Mr. J. A. Briggs, has returned from the State Agency of Ohio, in New York, which position he has accepted for the last three years.

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	When Payable.
Atlantic and Great Western.....	N.Y. & Pa.	64	48	\$	\$	\$	\$	\$	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
Baltimore and Ohio.....	Md.	64	380	13,111,800	10,781,833	566,079	3,922,203	2,305,788			2,500,000	6	95	1885	
do do											700,000	6	84	1880	
do do											1,128,500	6	90	1875	
do do											1,000,000	6		1867	
do Washington Branch.....	Md.		30	1,650,000							791,000	7	55	1866	
Bellefontaine and Indiana.....	Ohio & Ind.	118	118	1,859,813	1,256,750	139,120	314,090	8,795	Dec. 1860.	1st Mortgage.....	160,000	7		1870	
do do															
Buffalo and State Line.....	N.Y. & Pa.	122	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860	2d ".....					
do do															
Burlington and Missouri.....	Mo.		75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000	6	100	1864	
Camden and Amboy.....	N. J.	132	96	3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	397,000	7	62	1861	
Central Ohio.....	Ohio.		137	In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7	80	1864	
do do											800,000	7	64	1865	
do do											950,000	7		1865	
do do											1,365,800	7		1876	
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	140,000	7	106	1865 & 1870	
do do											600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.		222	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do											1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report	received.						1,000,000	10			
do do											400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		104	2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	1st Mortgage.....	200,000		41		
do do											1,250,000	7	80	Feb. & Aug.	
Chicago and Rock Island.....	Ills.	52	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	Gen'l 1st Mortgage.....	3,600,000	7	48	Feb. & Aug.	
Chicago, Burlington and Quincy.....	"	78	138	4,689,340	4,814,515		1,514,428	761,830		2d ".....	2,000,000	6	26	May 1.	
do do											2,172,000	8	106	1863	
do do											813,000	8	108	1869	
do do											399,000	7		1867	
do do											303,000	7		1869	
do do											392,000	7		1864	
do do											245,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
Cincinnati, Hamilton and Dayton.....	Ohio.	99	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do											950,000	7	100	1860	
Cincinnati, Wilmington & Zanesville ..	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do											532,000				
do do											104,000				
do do											305,509				
Cleveland and Mahoning ..	Ohio.	68	68	1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do											469,000				
do do											344,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	22	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1860	
do do											1,188,000	7	91	1873	
do do											1,165,000	7	80	1865	
do do											1,154,000	7	64		
Cleveland and Toledo.....	Ohio.	47	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mortgage.....	359,000	65		1867	
do do											263,000	65		1872	
do do											265,000	75		1862	
do do											521,000	75		1863	
do do											293,300	75		1864	
do do											44,500			1862	
do do											300,000			1864	
Cleveland, Columbus and Cincinnati..	Ohio.	123	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000			1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	125	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 13, 1860	1st Mortgage.....	564,000	7	99	1861	
do do											303,000	7		1862	
Columbus and Xenia.....	Ohio.	105	54	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700		92	1860 to 1866	
Columbus, Piqua and Indiana.....	"		103	In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"		142	2,176,666	2,512,000	292,267	375,002	212,107		2d ".....	2,212,000	8			
do do											300,000	50			
Dayton and Western.....	Ohio.		38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	2,500,000	7		1875	
Detroit and Milwaukee.....	Mich.		186	No report						2d ".....	1,000,900	8		1866	
do do															
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111	51	No report											
Dubuque, Marion and Western.....	Ohio.		36	469,762	728,853	152,694	152,398	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Eaton and Hamilton.....	Ind.		132	956,061	1,219,100	249,868	124,140								
Evansville and Crawfordsville.....	Wis.			Operated by Galena & Chicago Union.											
Fox River Valley.....															
Galena and Chicago Union.....	Ills.	78	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000	105		1862 & 1863	
do do											1,520,000	100		May 1, 1875	
Great Western.....	Ills.		175	1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do											1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.		84	400,000	No report	75,000	63,141	13,573		1st " E. D.					
Greenville and Miami.....	Ohio.		32	300,000	473,000										
Hannibal and St. Joseph.....	Mo.		206	1,041,066	10,554,000	220,306	996,907	512,933	Sept. 1, 1860.	Land Mortgage.....	5,000,000		26		
do do											1,354,000		30		
Hartford and New Haven.....	Conn.		62	2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	927,000	6	99	1873	
Hudson River.....	N. Y.	45	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	108		1869 & 1870	
do do											2,000,000	108		1870	
do do											1,840,000	106		1875	
do do											38,000	92		1868	
Illinois Central.....	Ills.	57	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	12,885,000	92		1875	
do do											4,115,000	96		1875	
do do											42,740				
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000	10			
do do											578,000	10			
do do											38,700	10			
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000	7	85	1866	
do do											400,000	7	85		
do do											200,000	62			
Indianapolis, Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mortg.	649,984				
do do											314,000				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report								
Iron.....	Ohio.		13	118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st ".....	249,000	7	75	1861	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		2d ".....	392,000	7	70	1873	
do										1st Mortgage.....	160,000	6			
do										1st ".....	250,000	7			
do										2d " Conv.....	1,000,000	7			
do										3d ".....	600,000	7			
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.....	903,000		89		
do										2d " E. D.....	1,000,000				
do										1st Land Grant W. D.....	4,000,000		21		
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.	29		514,433	130,000		108,944	43,967	June 30, 1861	1st Mortgage.....	1,300,000	6			
Little Miami.....	Ohio.	100	65				1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000			1883	
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		245,910	98,679	June 30, 1861	1st Mortgage.....	248,000				
do										1st Mortgage.....	2,000,000	7			
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.....	400,000				
do										1st " Memphis Br.....	500,000				
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,989	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.	208		8,561,213	190,408	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv.....	2,500,000	7		1868	
do										2d ".....	2,000,000	7			
do										3d ".....	1,500,000	7			
do										Sterling Income.....	333,000	4			
Michigan Central.....	Mich.	59½	284	6,057,784	7,968,489	125,000	2,130,609	910,169	May 31, 1861	Domestic.....	928,617		92½	1872	
do										1st Mortgage.....	467,483	6	84	1869	
do										1st " Conv.....	500,000	6	96	1860	
do										1st " unconv.....	250,000	8	104½	1869	
do										1st " Dollar Conv.....	2,598,000	8	108	1862	
do										1st " S. F. Conv.....	4,153,000	8	99	1860	
Michigan South'n & North'n Indiana	Mich &	5	246	9,018,200	9,714,704	437,886	2,075,459	1,039,820	Mar. 31, 1861.	Mort. Mich. So.....	991,000		103	1861	
do										" Nor. Ind.....	985,000		100	1861	
do										" Goshen Line.....	1,168,000		100	1863	
do										S. F. Toledo.....	2,650,000		100	1863	
do										2d Mortgage.....	2,465,000		100	1877	
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8			
do										2d ".....	200,000	7			
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8			
do										2d ".....	600,000	8			
Milwaukee and Prairie du Chien.....	Wis.	27½	192	4,944,000	2,556,000		583,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	99	1891	
Milwaukee and Western.....	Wis.	71													
Mississippi and Missouri.....	Iowa.	35		No report						1st Mortgage Conv.....	1,000,000	7			
do										2d " S. F.....	400,000	7			
do										Oskaloosa Div.....	1,425,000	7			
do										Land Grant.....	7,000,000	7			
New Jersey.....	N. J.	13	34	4,397,808	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000		102½		
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.						
New York and Erie Pref.....	N. Y.	67½		Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860	1st Mortgage.....	3,000,000		104		
do		33½								2d ".....	4,000,000		99½		
do										3d ".....	6,000,000		90		
do										4th ".....	4,900,000		82½		
do										5th ".....	1,792,500		105½		
New York and Harlem Pref.....	Conn.	44	138	5,717,190	6,055,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	101	1873	
do common.....		15								2d ".....	1,000,000	7	101	1864	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	7	94	Dec. 1, 1866	
do										".....	972,000	6		Oct. 1, 1875	
New York Central.....	N. Y.	90	556	24,000,000	14,613,065	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.....	7,925,000	6	101	May 1, 1883	
do										Mortgage.....	3,000,000	7	106½	June 15, 1864	
Northern Central.....	Md.	138		2,260,000	5,890,300	537,026	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,086,500	6			
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6			
Ohio and Mississippi, Eastern Div.....	Ohio & Ind	192		Leased.	9,880,000	2,330,030	892,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500				
do										3d ".....	316,995				
do										Construction.....	4,637,920				
do										Income.....	3,591,185				
Ohio and Mississippi, Western Div.....	Ills.	148			3,292,403		No report			State Loan.....	7,000,000				
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W.....	2,800,000	6			
do										Construction.....	4,500,000	6			
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.....	4,905,000	6	104½	1888	
do										2d ".....	2,319,000	6	98½	1875	
do										2d " Sterling.....	1,957,440	6		1875	
do										State Works.....	7,200,000	5	89		
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report			1st Mortgage.....	2,300,000	6	99½	1894	
Philadelphia, Wm. and Baltimore.....	Del.	98		5,600,000	2,390,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	1st Mort. O. & P.....	1,000,000	7	92	1865	
do										2d ".....	750,000	7	7	1866	
do										1st " O. & I.....	1,000,000	7		1872	
Pittsburgh and Connellsville.....	Pa.	49		1,755,828	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	2d ".....	280,000	7		1873	
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.	Pittsburgh Subs'n.....	500,000	7			
Sandusky, Dayton and Cincinnati ..	Ohio.	170		2,697,000	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1866	
do										".....	997,000	7		1866	
do										".....	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1866	
Scottdale and Hocking Valley.....	Ohio.	56		401,977	500,000	100,000	110,200	53,100							
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000				
do										2d ".....	450,000				
Stuebenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d ".....	900,000	7		1865	
do										1st Mortgage Conv.....	1,000,000	7	110	1862	
Terre Haute, Alton and St. Louis.....	Ills.	208		No report						2d " Conv.....	2,000,000	7	83	1868 & 1870	
do										1st " Bel. & Ill.....	517,000	7		1873	
Terre Haute and Richmond.....	Ind.	100	73	1,361,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	92	1866	
Toledo, Wabash and Western.....	Ohio & Ind	51	243	2,113,506	5,996,919	52,389	233,546			1st Mortgage.....	3,400,000	7	60½	Aug. 1, 1865	
do										2d ".....	2,500,000	7		Nov. 1, 1878	
do										Mort. Coupons.....	94,049	7		1860 to 1865	

THE EIGHTH CENSUS.

We find in the New York Economist the advance publication of some interesting chapters from the forthcoming report of Superintendent Kennedy of the census of 1860. They will be read with interest as they develop the rapid growth of important branches of industry in our country.

COTTON GOODS.

Among the great branches of pure manufacture in the United States, that of cotton goods holds the first rank in respect to the value of the product and the amount of capital employed. Aided by the possession of the raw material as a product of our own soil, and by the enterprise and ingenuity of our people, this valuable industry has grown with a rapidity almost unrivaled.

The total value of cotton goods manufactured in New England was \$80,301,535, and in the Middle States \$26,272,111—an increase of 83.4 per cent in the former, and 77.7 in the latter. The remaining states produced to the value of \$8,564,280, making the whole production during that year \$115,137,926, against \$65,501,687, the value of this branch in 1850, or an increase in the general business of nearly 76 per centum in ten years. In the States of Maine and New Jersey the manufacture increased in the same time 152 per cent; in Pennsylvania, over 102 per cent; in New Hampshire and Connecticut, over 87 per cent; in Massachusetts, nearly 69 per cent, and in Rhode Island 88.7 per cent. The total production in this branch was at the rate per capita of \$3 69 for every individual in the Union, equivalent to 46½ yards of cotton for each, at the medium price of 8 cents per yard. The average product per head in 1850 was 32½ yards. The increase alone has, therefore, been at the rate of 11 yards for each person, or nearly equal to the average annual consumption per capita in 1830, when it was estimated to amount to 12 yards. The number of hands employed in the manufacture in 1860 was 45,315 males, and 73,605 females, an increase in the male operatives of 10,020, and in the female of 10,944 since 1850. The average product of the labor of each operative was \$969. The number of spindles was returned at 5,035,798, being an increase of 1,402,105, or 38 per cent, over the aggregate in 1850, which was estimated at 3,333,693. The New England States possess 3,959,267, or 78.6 per cent. of the whole, which Massachusetts alone employs 1,739,700, or 29.3 per cent. of the number returned in the Union. The increase of spindles in the last decade was, in New England, 1,208,219, or 30 per cent. In the State of Maine, 186,100, or 163.3 per cent; in the State of New Hampshire 229,084 or 52.1 per cent; in the State of Massachusetts, 451,609, or 35 per cent; in the State of Rhode Island, 141,862 or 22.7 per cent; in the State of Connecticut 211,188, or 83.1 per cent; while in Vermont it exhibited a decrease.

The product per spindle varies in the different States, partly accounted for by the fact that many manufacturers purchase yarns which have been spun in other States.

The product of cotton goods per spindle is as follows:

In Maine, \$22 12; Massachusetts, \$21 12; New Hampshire, \$24 87; Vermont, \$18 13; Rhode Island, \$16; Connecticut, \$16 46. The average in the New England States is \$20 30; in the Middle States \$30 38, and in the whole Union, \$22 86.

The quantity of cotton used in the fabrica-

tion of the above goods was 364,036,123 lb, or 910,090 bales of 400 lb each. Of this amount the New England States consumed 611,738 bales, and Massachusetts alone 316,665. The consumption per spindle in that year in the various States and sections was as follows:

	No. spindles.	lbs. cotton.	lbs. per spindle.
Maine.....	300,000	23,438 723	78
New Hampshire.....	660,885	39,912,644	59.5
Vermont.....	19,712	1,053,250	53.7
Massachusetts.....	1,739,700	126,686,009	72.2
Rhode Island.....	766,100	34,521,698	50.2
Connecticut.....	464,060	15,799,140	34
In New England.....	3,959,267	237,844,854	61.8
In the Middle States.....	61,661	76,055,606	88.26
In the United States.....	5,035,798	364,036,123	72.2

When we consider the large number of hands, and especially of women and children, who find employment in this business, the quantity of raw material, of machinery and of fuel, exclusively of American production, employed in this branch, and the amount of comfortable clothing and household stuffs supplied at cheap rates, or the amount it contributes to the internal and foreign commerce of the Union—its progressive increase is a subject of the highest satisfaction, and its growth both here and abroad is one of the marvels of the nineteenth century.

WOOLEN MANUFACTURES.

The returns of woollen manufactures show an increase of over 51 per cent. in ten years. The value of woollen and mixed goods made in 1850 was \$45,281,764. In 1860 it amounted to \$68,865,963. The establishments numbered 1,909, of which 453 were in New England, 748 in Middle, 479 in the Western, 2 in the Pacific and 227 in the Southern States. The aggregate capital invested in the business was \$35,520,527, and it employed 28,780 male and 20,120 female hands, 639,700 spindles and 16,075 looms, which worked up more than eighty million pounds of wool, the value of which, with other raw materials, was \$40,460,300. The foregoing figures include satinets, Kentucky jeans and other fabrics of which the warp is cotton, though usually classed with woolens. In the manufacture of these mixed goods the amount of cotton consumed is 16,008,625 lbs, which, with 364,036,123 lbs used in making cotton goods, as previously stated, amounts to 380,044,748 lbs or 950,112 bales, exclusive of a considerable quantity used annually in household manufactures and for various other purposes.

The largest amount of woolens was made in New England, where the capital was nearly twenty millions of dollars, and the value of the product \$38,509,080, but little less than the total value of 1850. More than half the capital and nearly one-half of the product of New England belonged to Massachusetts, which had 131 factories of large size. Rhode Island ranked next, and had increased its manufacture 163 per cent. in ten years, that of Massachusetts 48 per cent. The value of woolens produced in the Middle States was \$24,100,488, in the Western, \$3,718,092, and in the Pacific and Southern \$2,588,303. The sectional increase was: in New England, 52.1, in the Middle States 54, and in the South 107, the last showing the greatest relative increase. Pennsylvania, next to Massachusetts, was the largest producer, having 447 factories which made \$12,744,373 worth of woollen and mixed fabrics, an increase of 120 per cent. A value of \$8,919,019 was the product of 222 establishments in the city of Philadelphia.

The State of New York holds the third rank, in relation to this industry, its manufactures amounting to more than nine millions of dollars. The wool manufacturress of Maryland

exhibit an increase of 86 per cent. In Ohio, which produced in 1850 a greater value of woollens than all the other Western States, there was a decrease on the product of 1850, owing, probably, to the shipments of wool to Europe, which, in 1857, was found to be the most profitable disposition of the rapidly increasing wool crops of that State. In Kentucky, now the largest manufacturer of wool in the West, the product was \$1,128,882 and the increase in ten years 40.4 per cent; while in Indiana, which ranks next, it was 31 per cent, and in Missouri 18.8, on the product of 1850.

The extension of this important manufacture is a subject of great interest to the country, inasmuch as our climate renders woollen clothing necessary throughout a large part of the Union during much of the year; and because it would supply the best market to the wool grower.

The quantity of wool returned for the whole Union in 1850 was upwards of 52,502,000 lbs. Sheep raising has been greatly extended and improved since that date in Ohio, Texas, California and other States, and the clip in 1860 amounted to 60,511,343 lbs; an increase of 15.2 per cent. in ten years. The yield still falls short of the consumption, and large quantities continue to be imported, notwithstanding the amount of territory adapted to sheep husbandry.

LINEN GOODS.

The manufacture of linen goods has made but little progress in this country. A few miles, chiefly in Massachusetts, make crash and course fabrics, the largest two in the State produced six million yards in 1860. Others are extensively engaged in making twines, shoe and other threads. It is to be regretted that the manufacture of flax has not attained greater magnitude in a country where the raw material is so easily and cheaply grown. Farmers throughout the West have raised the crop simply for the seed and thrown out the fibre as valueless.

FLAX COTTON.

The manufacture of fabrics from flax cotton has been commenced and success in a new branch of industry is confidently expected. The inventive genius of our countrymen has perfected machinery for the preparation of flax for spinning, which can be furnished, it is alleged, at as low a rate as the product of Southern cotton fields.

SEWING SILKS.

The manufacture of sewing silks is extensively carried on in this country. Including tram, organzine, &c., the production exceeded five million dollars in the States of Connecticut, New Jersey, Massachusetts, Pennsylvania and New York, their relative values being in the order mentioned. Ribbons are made to a small extent, but the chief manufacture of silk consists of ladies' dress trimmings, coach lace, &c., of which the cities of Philadelphia and New York produce to the value of \$1,260,725 and \$797,682 respectively.

The earnings of the Hudson River Railroad for July were:

July 1862.....	\$159,763 73
July 1861.....	114,864 23

The Galena and Chicago R. R. earned in July:

1861.....	\$145,369 60
1861.....	190,971 70

Increase..... \$45,582 60

CAR WHEELS.

We observe a new style of car wheel has recently been patented in England. It is wholly of wrought iron and consists of three pieces. 1st. The hub which is stamped and has a raised rib on its exterior, on which the plates connecting the hub with the tyre are bolted: 2nd, two circular plates of boiler plate iron to connect the hub with the tyre, 3rd, the tyre which is rolled and has also a rib on its interior corresponding with the exterior rib of the hub and to which the circular plates are bolted. This would seem to be a very simple and economical construction for a wheel, but practical experience alone can decide as to its durability and utility. If practicable it would certainly have the great merit lightness as compared with the ordinary wheel. Our own opinion would favor the employment of the chilled cast tyre in place of the wrought iron one as used in England.

RAILROADS ORGANIZED IN THE STATE OF NEW YORK DURING THE YEAR 1861.—The following companies organized during the year under the General Railroad Act:

Albany Railroad Company.....	March 2, 1861
Brooklyn City and Ridgewood Co.....	Feb. 1st 1861
Buffalo branch of Erie Railway Co.....	June 13, 1861
Coney Island and Brooklyn Railway Co.....	Dec. 10, 1860
East-New York and Jamaica ".....	Nov. 22, 1860
East and North River ".....	April 2, 1861
Erie Railway ".....	June 23, 1861
Hudson and West Shore ".....	Oct. 3, 1860
International ".....	Feb. 15, 1861
New York ".....	Jan 11, 1861
New York and Lake Mahopac ".....	Jan 11, 1861
Port Morris and Westchester ".....	May 22, 1861
Rome, Watertown and Ogdensburg Railroad Co.....	July 10, 1862
Third Avenue and Frodham Railroad Co.....	April 5, 1861
Utica and Black River ".....	May 22, 1861
Van Brunt street and Erie Basin Railroad Co.....	Feb. 15, 1861

The articles of association of the Buffalo branch of the Erie Railroad are filed; the portion of the Buffalo and New York City Railroad Company, lying between Attica and Hornellsville, having been sold under foreclosure of mortgage, on the 21st of March, and a new company formed under the name of the Buffalo Branch.

The company now known as the Erie Railway was formed pursuant to chapter 169 of laws of 1860, and chapter 119 of laws of 2861. The New York and Erie Railroad was sold under foreclosure of mortgage and a new company was formed under that name.

RAILWAYS IN ITALY.—MM. de Rothschild and Talabat have received concessions of lines following the shores of the Adriatic from Ancona as far as Otranto, via Tremoli, Foggia, &c.; secondly, of a line from Foggia to Naples, Ascoli, Eboli, and Salerno; thirdly, a section from Caprena to Pescara, via Sora, Celano, &c.; and fourthly, a line from Brescia to Voghera, via Cremona and Pavia. The concessionaires, who are to establish a great workshop at Naples for the construction of locomotives and rolling stock, are also authorized to purchase the line from Naples to Salerno with its Castellamare branch. The period prescribed for the execution of the works is very brief, the Brescia and Voghera being directed to be finished in two years, and one year being allotted for the Naples and Eboli line. The concessionaires are to form within six months a company, which is to be eventually amalgamated with the Lombardo Venetian undertaking, already the most extensive railway system in the world.—*London Engineer.*

MONETARY AND COMMERCIAL.

The last week has not been characterized by as stirring events in monetary circles as the two previous ones. The question of premium on specie is plainly in a state of change. Although still at an enormous premium, it is much lower than we have had heretofore quoted it. In the first place all Europe is not so insane as to desire to sell its securities at any and every sacrifice, hence limits are fixed on sales and remittances. Next, the order prohibiting the use of specie in buying cotton and sugar at the South has put an end to the speculative demand for gold for this purpose. Next there has been an increase in the export of agricultural products and next we are beginning to get the army of the Potomac into a more respectable position. All these cases combined have had their effect in reducing the rates on gold and silver. We quote rates for specie and exchange as follows:

	BUYING.	SELLING.
New York.....	$\frac{1}{2}$ dis.	par.
Boston.....	$\frac{1}{2}$ dis.	par.
Philadelphia.....	$\frac{1}{2}$ dis.	par.
Baltimore.....	$\frac{1}{2}$ dis.	par.
Gold.....	15 prem.	15 prem.
Silver.....	5@6 prem.	8@10 prem.
Demand Notes.....	4 prem.	.....

In New York, also, rates are declining. The *Tribune* of last Saturday says:—Gold has been fairly active over the counter to-day, and the quotation is without change from yesterday. The transactions are at 115@115 $\frac{1}{2}$, closing at 115 $\frac{1}{2}$. Silver is 109@110. Demand Notes, (gold) are 104 $\frac{1}{2}$ @105, with not much demand. As they must be steadily absorbed for Custom-House purposes, holders are confident and do not yield easily. The 7 3-10 Treasury Notes have sold as low as 102 $\frac{1}{2}$ during the day; at the close they are steady.

The following are the exports of specie for the week ending Aug. 2:

July 30—Steamship Persia for Liverpool:	
American Gold Coin.....	\$182,700
Mixed Gold and Silver.....	140,000
California Gold Bars and Coin.....	50,000
Aug. 2—Steamship City of Washington, Liverpool:	
Sovereigns.....	17,801
Mexican Silver Dollars.....	4,000
American Gold Coin.....	233,000
Aug. 2—Steamship N. York, Southampton and Bremen:	
American Gold Coin.....	61,000
California Gold Bars.....	50,000
Mexican Silver Dollars.....	2,400
Five-Frank Pieces.....	2,900
Danish Dollar Pieces.....	2,100
English Silver Coin.....	1,900
German Gold Coin.....	700

Total for the week.....\$748,523

The coinage of the United States Mint, Philadelphia, in July, was \$69,520 in double eagles, and \$52,400 in quarter eagles—being a total coinage of gold of \$121,920. The silver coinage was \$5,000 in dollar pieces, and \$13,200 in quarter pieces—a total of \$18,200. The great feature of the month was the heavy manufacture of cents, of which 3,600,000 were made, of the value of \$36,000. The total value of the coinage of the month is \$176,120, covering 3,682,236 pieces.

The following is the reply of Secretary Chase, to an inquiry as to whether the interest on Certificates of Indebtedness would be paid in gold:

TREASURY DEPARTMENT, July 31, 1862.

SIR: Your letter of the 25th inst., making inquiries in regard to the payment in coin of interest on the Certificates of indebtedness, is received.

The interest will be paid in coin, upon redemption of the Certificates, before which time the question can not practically arise.

Meanwhile, they are convertible into Five-twenty 6 3 cent. Bonds, the interest on which is payable at stated periods, in coin. Very respectfully,

S. P. CHASE,
Sec'y of the Treasury.

We noticed in our last the decision of the Courts of Illinois, establishing the fact that the United States Treasury Notes may be received for county and town taxes in that State. The same issue is now before the courts of California.

Money is quite abundant for all legitimate purposes. Well known business houses have no trouble in procuring all they want at very low rates. The offerings of paper are quite light.

General business has not been quite as active as during previous weeks. The tendency of prices in the dry goods market is upward. This is the case also at the east. We understand that collections of claims are beginning to come in better than heretofore, and that prospects look encouraging in that direction.

Freights have been very active on the railroads. The companies have hardly been able to get their rolling stock back over the roads, in season to prevent unpleasant accumulation at the depots. The result has been an advance in rates, which has produced a temporary reduction in the pressure. It is very evident, however, that in a season like this, when the crops of last year were very heavy, the demand for agricultural products good, the river practically not available, the railroads are the only resources left and must be crowded to their utmost capacity.

Flour is in good demand. Superfine sells at \$4.00 to \$4.05. Extra \$4.10 to \$4.20 and fancy brands \$4.30 to \$4.60. Receipts of wheat have been large. Prices are as follows: Red 75 to 80 cts, White 85 to 90 cents. Corn advanced to 40 cts., owing to the increased demand from distilleries. Rye 58 cts., in good demand. Oats 42 cts. New Barley 75 cts. Whiskey reached 27 but afterwards fell to 25 $\frac{1}{2}$. Hogs are in active demand for the season at \$3.00 to \$3.25 for slop fattened and \$3.40 to \$3.65 for corn fattened. Lard has been in demand at 8 $\frac{1}{2}$ to 8 $\frac{3}{4}$ in tierces and 8 $\frac{1}{4}$ cents in kegs. Butchers' Lard 7 cts. in bulk and 7 $\frac{1}{2}$ to 7 $\frac{3}{4}$ cents packed. Shoulders smoked and packed 3 $\frac{1}{2}$ cents. Sugar cured hams 9 $\frac{1}{2}$ to 10 cents. Country cured hams, prime, bring 8 $\frac{1}{2}$ to 9 $\frac{1}{2}$ and common 7 $\frac{1}{2}$ to 7 $\frac{3}{4}$ cents. Sales of hams in bulk have been made at 5 $\frac{1}{2}$ cents.

Cotton closes dull at 35 to 40 cents for spinning. The Price Current foots up the whole amount received here since March at 22,526 bales of which over 3,300 were received last week.

FRENCH LOCOMOTIVES.

We find in the London Engineer the following description of some large locomotives now running on the railroads of France. As they greatly exceed the size of any we have in our country, the dimensions must be interesting:

Among the great number of locomotives running on the Northern Railway of France are twelve of a class of which the makers, Messrs. Gouin & Co., of Paris, have sent an example to the London Exhibition. These engines are designed for working heavy goods trains at moderate speeds, over considerable gradients. They are outside cylinder tank engines, with eight coupled wheels, and weigh 43 tons in working order. The fire box, intended for burning "slack" coal is entirely behind the back pair of wheels, and measures 4 ft. 10 in. long and 5 ft. 10 in. wide on the fire grate, the area of which is 28.2 square feet. The fire bars are exceedingly thin, and have very narrow spaces. The boiler is 4 ft. 4 1/4 in. in internal diameter, and contains 356 tubes, 11 ft. 6 in. long, and rather more than 1 9/16 in. in outside diameter, giving a total area of 1,559 square feet. A large superheater is made on the top of the boiler, and through this the chimney is carried back horizontally, presenting 129 square feet of drying surface, the chimney finally bending upwards at a point nearly over the foot plate. The cylinders are 18 7/8 in. in diameter, and the pistons have an 18 7/8 in. stroke. The coupled wheels are all 3 ft. 6 in. in diameter. The tank contains 1,275 gallons of water, and there is room for 2 tons of coal. The working pressure of steam is nine atmospheres, or 118 lb. per square inch. The weight of the engine, loaded, is 10 1/2 tons on the front axle, 10 3/4 tons on each of the two intermediate pairs of axles, and 11 tons on the hind axle, or 43 tons in all.

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

through Distance 280 Miles;

42 Miles Shorter than any other Route
NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C., H. and D. Depot, at 7:30 A. M., 3:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without rebilling or transhipment.

JOHN BRANT, JR., Superintendent

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent,

33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON, STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and takes collections

BUSH & LOBDELL, Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,
MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the
Most Reasonable Terms.

KNOX & SHAIN, Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums by Franklin Institute.)
419 1

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANA- POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily for the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M., Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M., Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M., Lafayette at 1:40 A. M. Chicago at 6:00 A. M., connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

J. T. CRAPSETT,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,

my21

CINCINNATI

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

NEW YORK, BOSTON,
AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.
Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.
Feb. 6.

CHARLES MINOT, Gen'l Sup't.

Baltimore and Ohio Railroad

RE-OPENED!



This great national thoroughfare is again open for

Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition,

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT

Will be more than sustained under the reorganization of its business.

In addition to the Unequaled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Belaire, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

1861. 1861
FAST TIME.
LITTLE MIAMI
 AND
COLUMBUS AND XENIA
 AND
CINCINNATI, HAMILTON & DAYTON
RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express.—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty. Connects at Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

7:40 A. M.—Morrow Accommodation.—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad to Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation.—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Richmond, Indianapolis, and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:30 P. M.—Accommodation.—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express.—From Cincinnati, Hamilton and Dayton Depot.—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,
 General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
 No. 67 West 6th St. bet Walnut & Vine
 CINCINNATI O

J. W. MORRILL. G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders are respectfully solicited, with the assurance that pains will be spared to give entire satisfaction to all.

1862. 1862.
Pennsylvania Central R. R.
 285 MILES DOUBLE TRACK.



(With its Connections)
 IS A FIRST CLASS ROUTE,
 FOR SAFETY, COMFORT AND SPEED,
 TO ALL THE EASTERN CITIES!
 THE TRACK IS STONE BALLASTED
 AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
 (with close connections from Western Cities.)
 ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
 AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
 ONE TRAIN RUNS DAILY (430 MILES.)
 VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
 Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
 BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.
 ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.
 By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

J. W. BROWN & CO., Cincinnati, Ohio.
 D. A. STEWART, Freight Agent, Pittsburgh.
 CLARKE & CO., Transfer Agents, Pittsburgh.
 R. C. MELDRUM & CO., Madison, Indiana.
 J. E. MOORE, Louisville, Ky.
 W. W. AIKMAN & CO., Evansville, Ind.
 R. F. SASS, St. Louis, Missouri.
 CLARKE & CO., Chicago, Illinois.
 W. H. & E. L. LANGLEY, Gallipolis, Ohio.
 G. B. NEAL, Parkersburg, Virginia.
 HALL & CO., Marietta, Ohio.
 H. S. PIERCE & CO., Zanesville, Ohio.
 McDOWELL & McCORM, Portsmouth, Ohio.
 R. McNEELY, Maysville, Ky.
 J. P. JOHNSTON, Ripley, Ohio.
 JOHN TODD, Covington, Ky.
 G. L. HEATON, Cleveland, Ohio.
 R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
 L. L. HOUGHTON, Gen'l Ticket Agent, Philadelphia.
 H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS
 AND
XENIA RAILROAD.

TRAINS RUN AS FOLLOWS
 SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:30 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton
RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day, Toledo & Day, Huntsville.....	5:20 P. M.	10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.

Eastern Night Express.....10:00 P. M. 5:40 A. M.
 The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Terre Haute and Lafayette and Chicago Mail.....	5:05 A. M.	11:10 A. M.
Indianapolis and Chicago Night Express.....	3:20 P. M.	11:50 P. M.

Ohio and Mississippi Railroad.
CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

ns run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
u sville and St. Louis Mail.....	5:30 A. M.	10:45 P. M.
ymour Accommodation.....	3:00 P. M.	8:45 A. M.
uisville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.
 P. W. STRADER,
 General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

W. H. L. NOBLE,
 General Ticket Agent Indianapolis & Cincinnati Railroad.
 E. F. FULLER,
 General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR
FINDINGS

—AND—

MACHINERY,
 OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET
 NEW YORK.

ALBERT BRIDGES.

JOEL C. LANE

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.
Tube CLEANERS, Steel Wire and Whalebone BRUSH.

Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enameled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warming Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Piazza Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.
Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,
28 Platt Street, New York

N. W. BALDWIN, MATHEW BAIRD.
M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of
LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned
THEODORE DEHON,
no 1 10 Wal Broadway, New York

EDWIN J. HORNER,
SUCCESSOR TO

McDANIEL & HORNER,



**LOCOMOTIVE & RAILROAD
CAR SPRING**
MANUFACTURER,
WILMINGTON, : DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a *new style*, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being *ALIKE ON BOTH SIDES*, impossible to unravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.
Feb 12. WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

—AND—

Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Spt. 2. MOSELEY & CO.

JAMES FOSTER, Jr. & Co.,
MATHEMATICAL AND PHILOSOPHICAL INSTRUMENT MAKERS,
S.W. CORNER FIFTH AND RACE,

Cincinnati, Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

H. TWITCHELL.

JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Railroad iron on terms favorable to parties wanting to purchase
Ag. 4, m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,
Engine and Car Axles, Pump and Piston Rods
Bar of all Sizes,
And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works
June 8.

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, President.
WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1 1/4 to 10 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from 1/2 inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas, Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—from 1 to 24 inches diameter, and branches for same. &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER,
THOS. T. TASKER, JR., S. P. M. TASKER,
HY. G. MORRIS.

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MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroad offices for the South and West. For sale by 1,000 leading Stationers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, AUGUST 14, 1862.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

the space occupied by ten lines of Nonpareil	
square, single insertion.....	\$1 00
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
“ column, single insertion.....	5 00
“ “ per month.....	10 00
“ “ six months.....	40 00
“ “ per annum.....	80 00
“ page, single insertion.....	15 00
“ “ per month.....	25 00
“ “ six months.....	100 00
“ “ per annum.....	200 00
Cards not exceeding four lines, \$5.00 per annum.	

THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrangements are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.

Cincinnati, Hamilton & Dayton—

Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	10.10 A. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.10 A. M.
		5.40 A. M.

Sandusky, Dayton & Cincinnati—

Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation..	5.20 P. M.	10.10 A. M.

Marietta & Cincinnati—

Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.

Ohio & Mississippi—

Mail.....	5.05 A. M.	10.05 P. M.
Seymour Accommodation.....	3.00 P. M.	8.45 A. M.
Express.....	5.00 P. M.	6.53 A. M.

Indianapolis & Cincinnati—

Mail.....	5.05 A. M.	11.10 A. M.
Chicago Express.....	3.20 P. M.	11.50 P. M.

Dayton & Michigan—

Tol. & Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.

Cincinnati & Chicago Air Line—

Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.

Cincinnati, Wilmington and Zanesville—

Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.

Kentucky Central— (City time.)

First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

CINCINNATI AS A POINT FOR MANUFACTURE OF LOCOMOTIVES.

We see no reason why Cincinnati should not become a very important point for the manufacture of locomotive engines and railroad cars. The railroads which center around us all use both locomotives and cars; they are constantly wearing out and need constant renewal. Hence the demand must be a constant and unfailing one. We see no propriety, other things being equal, in our railroads, going a thousand miles to procure what can just as readily be had here.

In point of situation there is no city at the west, or indeed, in the country, better located than Cincinnati for business of this character. We have easy access to the iron and coal regions of Ohio and Pennsylvania by both river and rail, so that our supplies of these two necessary articles come to us directly from their place of production, and as good as they can be had anywhere in the world. Iron of the best quality is produced in the Ohio Valley at many points. We are also accessible to the mines of Missouri and Wisconsin. We are certainly very favorably situated for supplies of the raw material of the best quality. Our manufacturers also by laying in their supplies of coal at the season of high water are always sure of cheap fuel. Our supplies of lumber also come down to us at reasonable rates on the same mighty river that brings us our coal and iron. There is no eastern city where the manufacture of railroad cars and machinery is made a successful specialty that possesses equal advantages as a point for obtaining supplies of the material used in construction.

As a railroad center Cincinnati also occupies a very important position. The *three thousand miles* of railroad in operation in this state must certainly be nearer to Cincinnati as a depot of supplies and purchases than they are to the depots in other States. Then we have long lines radiating out from Cincinnati, some of which extend through neighboring States but whose natural point of supplies would be here. Commencing at the east we have the Marietta and Cincinnati, the Cincinnati, Wilmington, and Zanesville Railroad, the Little Miami Line extending to the lakes and thence to the borders of Pennsylvania; the Sandusky, Dayton and Cincinnati Line, the Dayton and Michigan Air Line extending to Detroit, the Cincinnati and Chicago Air Line extending to Chicago, the Indianapolis and Cincinnati Line with its immediate extensions and connections in Indiana; the Ohio and Mississippi Line with its extensions and connections; and lastly the Kentucky Lines which are all connected with the Covington and Lexington Line; making in all a grand total of about 10,000 miles of railroad in actual operation around this city as a center

and which would naturally draw its supplies from this source, could they be had as cheaply and as good as at more distant points. In this respect also there is no eastern city as well situated as Cincinnati, and none which can claim as many miles of railroad directly dependent on its business and interested in its welfare and prosperity.

At the usual ratio of locomotives in the whole country, there must be in use on these roads nearly three thousand locomotive engines, the annual depreciation of which is about ten per cent, thus making a demand for something like 300 locomotives per annum which should be wholly supplied at this point. But admitting that but one-third of this supply could be depended on, then we should have an annual demand for 100 locomotives to be built here. That this is not an extravagant estimate of the demand may be very readily seen from the number of miles operated and from the actual number that have been built here in times past. When Niles and Co. were in the locomotive business they used to turn out about fifty locomotives per year. Moore and Richardson turned out from 10 to 15 per annum, making in all from 60 to 65 locomotives that were formerly produced in the city annually. These were as good and substantial pieces of machinery as could be produced anywhere, and the records of their performance show them to be equally as efficient machines as are built anywhere in the country. Of these two firms, Niles and Co. have withdrawn from business and their establishment is now used by their successors for building portable and stationary steam engines. Messrs. Moore and Richardson still continue the business and sustain their reputation for building neat and substantial locomotives. It is true our western manufacturers do not put on as much ornamental brass work as some of the eastern manufacturers, but we believe the opinion is very current at the east now that the best manufacturers build the plainest engines, and that a vast amount of brass work on an engine is a general indication of a necessity of covering up poor workmanship.

There is certainly a field in Cincinnati for enterprising firms to engage in this branch of industry with a reasonable prospect of success. Of course they must be able to compete in appliances and workmanship with the best eastern makers. If they are not it will be idle for them to undertake the business. But surely in a place like Cincinnati, where there is a surety of supply of material and a market for the articles, there must be a field for enterprise. So also in the manufacture of passenger and freight cars. We believe there is no point in the country that affords so fine an opening for the establishment of a large and profitable business as this, and we would recommend it for the consideration of business men.

PASSENGER LIFE INSURANCE ON RAILROADS.

On the English railways they have a system of insuring passengers against loss of life or other accidents at very low rates. We have always thought that such a system would work well with us, but it has not yet been tried. We print below for the information of our readers the following report of the proceedings of the annual meeting of these companies, taken from the *London Mining Journal*.

RAILWAY PASSENGERS' ASSURANCE COMPANY.—The twenty fifth half yearly meeting of the proprietors was held at the Company's offices, 64 Cornhill, on Wednesday, Mr. James Clay, M. P., in the chair.

Mr. W. J. Vian (the Secretary) read the report of the directors, which was to the effect that—

The income of the Company for the half year ending Dec. 31 was £23,310 14s. 3d., of which £20,002 11s. 9d. was for general accident and £3,308 2s. 6d. for railway accident assurances—the amount received for the corresponding period of 1860 being £18,908 5s. 6d. It will be seen by the revenue account that the operations of the past half year have not been so satisfactory as those of the preceding. The cash actually received for premiums was £20,798 11s. 3d., and this, added to the balance from the previous half year and the interest on investments, forms the total of £34,696 0s. 10d. on the credit side of the account. Against this are charged the office expenses, advertising, etc., £4,487 16s. 11d.; commission, government duty, and stamps, £3,175 16s. 7d.; and compensation, £14,613 3s. 10d. After payment of the interest to proprietors to June, £352 13s. 3d., and appropriating £500 toward the replacement of the preliminary expenses, a balance remains invested and in hand of £11,534 10s. 3d. To this must be added the amount due from the clearing house and agents, £2,512 2s.; forming a total balance on revenue account of £14,043 13s. 3d. From this sum, in addition to the usual payment of interest at four per cent per annum for the past half year, the directors propose to declare a bonus of one shilling per share. One half the bonus will be paid to the shareholders, and the other half placed to the capital account, in further payment of the amount of the shares, as prescribed by the deed of settlement. The premium income for the year 1861 was £48,945 6s. 1d., against £38,708 10s. 7d. for 1860—the increase being at the rate of 26 per cent. The working expenses have been reduced from 35-26 per cent. in 1850 to 31-25 in 1861. While the business continues to progress in this satisfactory manner, another feature of the accounts is of a less pleasing character. The compensation paid during the year last past has been—for 9 fatal cases, £7,550; 1,527 claims for personal injury, £21,760 9s. 7d.—£29,310 9s. 7d., being at the rate of 59-93 per cent. of the premiums received, while in 1860 it was at the rate of 54-39 per cent. The directors can not but regard the growing proportions of this item with considerable uneasiness. In the belief of the sufficiency of the premiums charged, they were disposed to consider the increase as abnormal, and due to only temporary causes. They still believe this to be the case to some extent; but, at the same time, they feel constrained to admit that, after having exceeded the expected average for three successive years, a strong case for inquiry exists. It

demands, and will receive, their earnest and unremitting attention, and a committee has been formed carefully to examine the question. From the absence of reliable general data at the formation of the Company, the estimated risk was necessarily somewhat conjectural; but the multiplicity of accidents has exceeded the original calculations, and it is now proved, after the experience of five years, and from the cases actually entered upon the Company's books and paid for, that one in every twelve of the assured meets with an accident, more or less severe, in each year. The significance of this fact only needs to be appreciated by the public to induce them, in still greater numbers, to provide against casualties of such frequent recurrence.

The Chairman, in moving the adoption of the report, said that there was one paragraph in it which required some observation—he could hardly call it explanation—seeing that it concluded with a recommendation that a bonus should be declared of one shilling per share. The explanation was, that this was the half year at which they had the power to declare a bonus. There were funds justifying it at the last meeting, but they could not, under their Deed of Incorporation, then declare a bonus; and the fact was the greater part of what they now proposed to pay had been earned during the previous half year. The general features of the Company continued encouraging. Amongst them was the increase of 123,000 journey tickets, which proved that the business the office was originally established to transact was sound and good, the only objection to it being that it was not sufficient for a company of such magnitude. The increase of annual policies—6,700, or rather more than half as many as the whole number of the policies renewed during the past five years—was also satisfactory. Unfortunately, however, not only had their receipts from premiums increased, but there had been more than a proportionate increase in the amount paid for compensation. This was in part accounted for by natural causes, but in part, also, it still remained to be accounted for. Whether it was that the public were more alive to the value of being insured, and claimed for accidents which they would not have claimed upon formerly; whether medical men were less careful in giving certificates as to the nature of injuries arising from accidents which became claims; or whether the known liberality of the Company had induced people to insure with the view of making a dishonest profit, he could not say; but, whatever the cause, the fact of an increase remained, which it was impossible to account for on reasonable or honest grounds. The directors had given, and would continue to give, their most careful attention to this subject; they had not yet made up their minds as to the remedy, but in some way or other they were determined that a remedy should be applied. Whether by increased charge to the public—which they could well afford, seeing that the business of this Company was conducted on terms more favorable to the public than that of any other—whether by closer medical inspection, or by other means, he felt confident that by the next meeting steps would have been taken to bring the amount paid for compensations to a more just proportion to the number of tickets issued.

—The Michigan Southern earned in July:

1862.....	\$181,000
1861.....	126,000
Gain.....	\$55,000

INCREASED FREIGHT RATES.

Owing to the crowded state of the roads from here to the east, an increase has been in shipping rates from this city to the seaboard. The following are the new rates:

	1st Class.	2d Class.	3d Class.	4th Class.	Floor	Cotton
					per bbl.	per bale
To New York, rail..	\$1 65	\$1 30	\$1 15	70	\$1 40	\$6 50
To New York, rail and lake.....	1 57	1 22	1 10	65	1 30	6 10
To Boston, rail.....	1 75	1 37	1 20	75	1 50	6 65
To Boston, rail and lake.....	1 67	1 29	1 15	70	1 40	6 45
To Baltimore, rail.....	1 32	1 04	78	60	1 20	5 20
To Philadelphia, rail.....	1 42	1 14	85	65	1 30	5 70
To Albany & Troy, rail.....	1 65	1 30	1 15	70	1 40	6 50
To Schenectady, rail and lake.....	1 57	1 22	1 10	65	1 30	6 10
To Pittsburgh.....	70	58	44	32	65	2 90
To Toledo.....	45	35	30	22	5	1 75
To Detroit.....	45	35	30	25	50	1 75
To Cleveland.....	45	35	30	22	45	1 75
To Sandusky.....	45	35	30	22	45	1 75
To Dunkirk and Buffalo, rail.....	75	62	50	35	70	3 10
To Dunkirk and Buffalo, rail and lake.....	67	54	45	30	60	2 70

CENTRAL RAILROAD OF NEW JERSEY.

The following is the statement of this company for the six months ending June 30, 1862, together with the condensed balance sheet of the company.

The earnings for the six months are as follows:

	1862.	1861.
Receipts for six months ..	\$585,237 11	\$562,494 96
Expenses.....	274,443 23	240,517 32
Net earnings.....	\$310,393 88	\$321,977 64

The coal transportation during the same period was as follows:

	1862.	1861.
	tuns.	tuns.
Lackawanna coal tunnage for six months.....	229,486	263,717
Lehigh ..	102,623	114,449
Total.....	332,309	398,166

The following is the condensed balance sheet of the company:

CONDENSED BALANCE SHEET JULY 1, 1862.	
Railroad 64 miles long 30 being double track.....	\$4,513,482 04
Land and wharves at Elizabethport.....	298,469 00
Station houses, shops, etc	132,000 00
Engines and cars.....	508,782 22
Ferry interest and boats	217,200 00
Property accounts.....	208,142 10
Cash balances, etc	\$195,400 84
Less accounts payable.....	113,260 90—
	83,139 94
Total.....	\$6,001,196 39
Capital stock.....	\$3,630,000 00
Bonds 1st mortgage.....	\$1,400,000 00
" 2nd	600,000 00—2,000,000 00
Interest fund, interest accrued not yet payable.....	47,833 33
Dividend No 29 payable July 16.....	90,750 00
Renewal fund balance to credit.....	172,855 39
Net earnings.....	\$310,393 88—
Less interest account.....	\$69,136 30
Less dividends.....	181,500 00—250,636 30—
	59,757 59
Total.....	\$6,001,196 39

The net earnings of the six months are thus shown to be \$310,393 88, being a decrease of \$11,583 76 on those of the corresponding six months of 1861. This is owing to the damage done to the coal roads by the great freshet of June, which cut off the whole coal trade for a fortnight, and that from the Lehigh region for a month, making a reduction of \$44,000 in the receipts from coal. This will be more than made up before the close of the season, as there is a great de-

mand for coal and better prices are obtained for transportation.

After deducting the balance of the interest account and two quarterly dividends of 2½ per cent each there remains a surplus of profit of \$59,757 58. Of this amount \$32,585 25 has been expended on the work at the High Bridge, and on the extension of the second track westward to Hampton Junction.

PROGRESS OF RAILROADS IN THE UNITED STATES FOR THE DECADE OF 1850 AND 1860.

The following extract is taken in advance of publication from Mr. Kennedy's Condensed View of the Census of 1860, now in press at Washington.

The decade which terminated in 1860 was particularly distinguished by the progress of railroads in the United States. At its commencement the total extent in operation was 8,588.79 miles, costing \$296,260,128; at its close, 30,598.77 miles, costing \$1,134,452,909; the increase in mileage having been 22,004.88 miles, and in cost of construction \$838,192,81.

While the increase in mileage was nearly 300 per cent. and the amount invested still greater, the consequences that have resulted from these works have been augmented in vastly greater ratio. Up to the commencement of the decade our railroads sustained only an unimportant relation to the internal commerce of the country. Nearly all the lines then in operation were local or isolated works, and neither in extent nor design had begun to be formed into that vast and connected system which, like a web, now covers every portion of our wide domain, enabling each work to contribute to the traffic and value of all and supplying means of locomotion and a market almost at his own door, for nearly every citizen of the United States.

Previous to the commencement of the last decade only one line of railroad had been completed between tide water and the great interior basins of the country, the products of which now perform so important a part in our internal and foreign commerce. Even this line, formed by the several links of the New York Central road, was restricted in the carriage of freight except on the payment of canal tolls, in addition to other charges for transportation, which restriction amounted to a virtual prohibition. The commerce resulting from our roads consequently has been, with comparatively slight exceptions, a creation of the last decade.

The line next opened, and connecting the western system of lakes and rivers with tide-water, was that extending from Boston to Ogdensburg, composed of distinct links, the last of which was completed during 1850. The third was the New York and Erie, which was opened on the 22nd of April, 1851. The fourth in geographical order, was the Pennsylvania which was completed in 1852, although its mountain division was not opened until 1854. Previous to this time its summit was overcome by a series of inclined planes, with stationary engines, constructed by the State. The fifth great line, the Baltimore and Ohio, was opened in 1853, still further south. The Tennessee river, a tributary of the Mississippi, was reached in 1850, by the Western and Atlantic Railroad of Georgia, and the Mississippi itself, by the Memphis and Charleston Railroad, in 1859. In the

extreme North the Atlantic and St. Lawrence, now known as the Grand Trunk, was completed early in 1853. In 1858 the Virginia system was extended to a connection with the Memphis and Charleston and with the Nashville and Chatanooga Railroads.

The eight great works named connecting the interior with the seaboard are the trunks or base lines upon which is erected the vast system that now overspreads the whole country. They serve as outlets to the interior for its products, which would have little or no commercial value without improved highways, the cost of transportation over which does not equal one tenth that over ordinary roads. The works named, assisted by the Erie canal, now form ample means for the expeditions and cheap transportation of produce seeking Eastern markets, and could, without being overtaxed, transport the whole surplus products of the interior.

Previous to 1850 by far the greater portion of railroads constructed were in the States bordering the Atlantic, and as before remarked, were for the most part isolated lines, whose limited traffics were altogether local. Up to the date named, the internal commerce of the country was almost entirely through water lines, natural and artificial, and over ordinary highways. The period of the settlement of California marks really the commencement of the new era in the physical progress of the United States. The vast quantities of gold it produced imparted new life and activity to every portion of the Union, particularly the Western States, the people of which, at the commencement of 1850, were thoroughly aroused as to the value and importance of railroads. Each presented great facilities for the construction of such works, which promised to be almost equally productive. Enterprises were undertaken and speedily executed which have literally converted them into a net work of lines, and secured their advantages to almost every farmer and producer.

The progress of these works in the aggregate, year by year, will be seen by the tabular statements at the close of the report. The only important line in the West, previous to 1850, was the one from Sandusky to Cincinnati, formed by the Mad River and Little Miami Roads. But these pioneer works were rude, unsubstantial structures, compared with the finished works of the present day, and were employed almost wholly in the transportation of passengers. Within the decade in place of this one line, railroads have been constructed, radiating from Lakes Erie and Michigan, striking the Mississippi at ten and the Ohio at eight different points, and serve as trunk lines between the two great hydrographic systems of the West. These lines are cut every few miles by cross lines, which, in the States east of the Mississippi, are sufficiently numerous to meet every public and private want, and to afford every needful encouragement to the development of the resources of the country.

The Southern States have been behind the Northern in their public enterprises, though at the date of the census, they were prosecuting them with great energy and vigor. The progress inland of the great trunk lines of the South has been already noted. The opening of the Mobile and Ohio, and the Mississippi Central, which will soon take place, will give completeness to the system of the Southwestern States, and leave little to be done to make it all that is wanted for that section of the country.

West of the Mississippi less has been done, for the reason that the settlements there are

fa more recent date, and the people less able to provide the means for their construction than those of the older States. But even our western frontier extensive systems have been undertaken and very considerable progress made in their execution.

A more interesting subject than the progress of our public works would be their results, as shown in the increased commerce and wealth of the country. But such inquiries do not come within the scope of this report. It is well ascertained, however, that our railroads transport in the aggregate at least 800 tons of merchandise to the mile of road in operation. Such a rate would give 26,000,000 tons as the total annual tonnage of railroads for the whole country. If we estimate the value of this tonnage at \$150 per ton, the aggregate value of the whole would be \$3,900,000,000. Vast as this commerce is, more than three quarters of it has been raised since 1850.

To illustrate the correctness of the estimate made, the following statement is added of the State of New York for 1860, with the estimated value of the same. The classifications are made by the companies:

	Tons carried.	Val. per ton.	Total value.
Products of the forest....	373,434	\$20	\$7,468,480
" of animals....	395,515	20	179,103,800
Vegetable food.....	1,103,640	50	55,182,000
Other agricultural prod.....	143,219	15	2,148,055
Manufactures.....	511,916	250	127,979,000
Merchandise.....	783,811	500	391,905,500
Other articles.....	930,244	10	9,302,440
Total.....	4,741,773	\$163	\$773,089,275

If we make a deduction of one quarter for duplications—a portion of the tonnage passing over more than one road—the aggregate would be 3,556,339 tons, having a value of \$579,681,799.

The railroads of Massachusetts transported, for the same years, 4,094,359 tons; or making the deductions for duplications, 3,070,027 tons, and having a value of \$500,524,201. The number of miles of railroad employed in the transportation of freight being 2,569 in the State of New York and 1,317 in the State of Massachusetts, with the deductions named, the amount of freight transported in these States averages 1,700 tons per mile. We have estimated the tonnage of all the railroads of the United States to average one-half the amount of the railroads in these States. That this is not an over estimate is shown by the following statement of the tonnage of several interior lines.

Roads.	Length, miles.	Tons trans.
Cleveland, Columbus & Cincinnati.....	141	295,835
Little Miami.....	120	343,961
Cleveland and Toledo.....	147	350,483
Michigan Central.....	282	378,570
Southern.....	125	388,679
Illinois Central.....	700	496,300
Chicago, Burlington & Quincy.....	310	538,670
Chicago and Rock Island.....	248	301,688
Galena and Chicago.....	239	381,188

Total..... 2,712 3,386,493
Average per mile, 1,350 tons.

—Annexed is a summary of the business of the Cleveland, Columbus and Cincinnati Railroad for the first six months of the present year as compared with the corresponding time of the past:

	1861.	1862.
Gross earnings Jan. 1 to June 30.....	\$504,459 61	70,530 09
Expenses, interest, and taxes.....	281,960 25	325,590 53
Net earnings.....	\$222,499 36	376,949 27
Dividend of 5 per cent.....		237,310 06
Surplus.....		\$139,639 27
Increase for six months, 1862, over same time in 1861:		
In gross earnings.....	\$197,071 18	
In net earnings.....	154,440 91	

GEOLOGICAL SURVEY OF THE PENNSYLVANIA OIL DISTRICT—PROF. RIDGEWAY'S REPORT.

To the Subscribers of the Report:—Rock Oil, *Oleum Terra*, or Petroleum, having been found in the counties of Crawford, Venango, and Warren, in the State of Pennsylvania, in considerable quantity by means of drilling into the earth along the margin of the streams, induced me to visit this region of Pennsylvania for the purpose of exploring (geologically) the strata of rock containing the oil and to learn the reason why deposits of rock oil exist in some localities near the surface and in others at a great depth, also from whence it comes, the cause of its production and the probability of how long it may last.

I arrived in the oil district at a seasonable time for an investigation of this kind, there having been a complete topographical survey made of Oil Creek, by Charles C. Smith, Civil Engineer, of Painesville, Ohio, and several thousand wells sunk by persons engaged in drilling, some of whom have perforated nearly the whole of the oil bearing strata, producing flowing wells yielding from 200 to 1,000 barrels of oil each per day. All of which has enabled me as a geological explorer to compare the drilled particles brought up by the sand pump, with the strata, at their outcroppings.

Although the war times were unpropitious for the survey, as regards funds, yet I am pleased to state that through the kind encouragement of George M. Mowbray, Esq., and other citizens of Titusville and the valley of Oil Creek, who looked at the subject in its true light, encouraged the survey to the extent of their ability, the result of which is worth an incalculable amount in a pecuniary point of view to the owners of oil lands and leases, and a collection of geological facts for the scientific world, also proving an additional crude material resource to the State of Pennsylvania for fifty years to come.

The low prices of petroleum and the failure of a number of wells to yield an amount of oil sufficient to warrant pumping for it, from shallow depths, agitated the people's minds with doubts and fears as to the final result should they dig deeper, which also was an additional stimulus on the part of the inhabitants of Oil Creek to have the region explored, thinking that facts collected might throw some light on the producer as well as the consumer.

During my examination I was frequently asked the question: "How deep shall I bore to obtain a flowing well?" But in no instance was I asked the question, "Am I in the right spot?" The former question is a difficult one to answer. A geologist to pretend to give the exact thickness of a bed of sandstone or a series of shales concealed far below the surface of the valley of Oil Creek, twenty-five miles from their out-croppings, is not practical, for the layers below may be identified by drilled particles, and measured at their out-crops in Erie county, and may swell up or thin out entirely as they descend below the valley. As an example, the 3d sandrock on Big French Creek, five miles from the town of Union, is ten feet thick, and the drillers of Venango county report it 45 feet in thickness. The latter question, ["Am I in the right spot?"] will not be answered very soon, but many who will yet fail in obtaining oil will reply to their friends, "I was not in the right spot!"

The amount of funds required for a survey was fixed at a war price, and yet only one-fourth of this sum was subscribed.

Hoping soon to make a complete geological survey in detail, of the whole of the oil district

in question, I offer the following report merely as a reconnaissance. In the meantime the drilling tools must sound not only the depth, but also the barren places, until a majority of the people more liberally encourage and have confidence in science of geology.

REPORT.—The strata of rock drilled into for petroleum, along the margin of Oil Creek, are in the Vergent Series of Rocks of Professor Rogers, and are composed of compact, close grained, thin bands of sandstones, red, olive and bluish colored argillaceous shales, containing beds of white, gray and brown micaceous sandstones. The white and gray sandstones being the thickest have been numbered by the drillers Nos. 1, 2 and 3. This numbering answers very well along the margin of Oil Creek in Venango county. But in Crawford county there is another bed of sandstone which I shall name the Titusville Bed T, Fig. 4, and also another very important one to drillers, in the vicinity of Hydetown and Centerville, which I shall name the Quarry Bed, Q, of Titusville. The former is cut by the drill and found lying immediate below the bottom land and borough of Titusville, and the latter is quarried in the back hills of Titusville where the building stone are taken for the use of the town. There is also a group of layers of soft brown micaceous sandstone near the tops of the hills in the vicinity of Titusville, some 45 feet in thickness, which is capped with the Vespertine conglomerate of Rogers.

* Fig. 1 represents the strata underlying the bed of Oil Creek in Venango county.

Beds of sand rock Nos. 1 and 2, with their associated thin belts of sandstone and shale crop out on the north side of Chestnut Ridge. Beds No. 3 and 4 with their associated layers crop out in the neighborhood of Waterford, Erie county, Pa., near the dividing ridge between the waters of Lake Erie and the waters of Oil Creek. Big French and Le Boeuff Creeks, in their descent in a southerly direction, have cut their way down through the 3d sand-rock and the layers below to the strata of slates A, Fig 2.

Fig. 2 is a vertical geological section taken on Big French Creek, about five miles north of the town of Union, in Erie county, where the whole of the lowest portion of the oil-bearing strata from the 3d sand rock down to the slates A are exposed to view showing distinctly the beds of sandstone B; soft yellow shales C; gray sandstone D; free pebble rock E; gray sandstone F; siliceous mud G; micaceous sandstone H; close grained sandstone I; olive colored shale J; soft sandstone K; hard sandstone L, containing seams of quartz pebbles; light colored shale M; and drift of sand pebbles and gravel N; capping the hills.

The siliceous mud G has disseminated throughout its mass impressions of marine plants (*fucoids*) and may be considered the lowest member, and a very important one, of the oil bearing group of strata. For along the slopes of the hills on Big French Creek, above the bed of free pebble rock, E, which I term the deviation belt between the oil-bearing strata above and the non-oil-bearing strata below, the petroleum may be distinctly seen oozing out from the layers, reposing above the

rock E, and below this conglomerate E there is not any appearance of petroleum issuing from the surface, and not any indications or bituminous odor arising from any of the rocks below when struck with the hammer.

K and L are beds of sandstone now being quarried at points along the line of the Philadelphia and Erie Railroad, and are used for building purposes. The foundation walls of Mr. Riley's Hotel, in the town of Union, were built of stone from beds K and L, and here I discovered petroleum oozing out from the walls, staining the face very much.

The Academy in Waterford, Erie county, Pa., was built some thirty-eight years ago with sandstone quarried from beds K and L on Big French Creek. Here to my astonishment the petroleum contained in the rock still oozes and trickles down the front and sides of the building, disfiguring its face so much up to the present day that painting is resorted to, to conceal the petroleum stains. The north side of the building which I examined closely, with a microscope to see if I could discover any marks or impressions of animated creation which might give rise to the origin of oil in the rock, is very much disfigured by stains from petroleum oozing out to the surface and that portion of the building has the appearance of an old oily iron pot exposed to the weather.

Such facts as the foregoing lead me to a course of reasoning as follows: That the oil must exist chiefly in the rock, and the cause of it being there, in all probability, originated from a vegetable growth. For the oil to flow from the coal field, up in a northerly direction, against the inclination of the strata, and to be found in these particular beds of sandstone and shale, and not in the formation above, is an impossibility. And for the oil to have flowed from the coal beds before their elevation above the Paleozoic Ocean to a point where the towns of Union and Waterford now stand is poor reasoning: for the oil would have raised to the surface of the water before running so far to settle in another formation far below the carboniferous strata.

Knowing that the lowest series of coal beds of the carboniferous strata are the thickest, and were made up from a rank growth of vegetation which fermented and produced the fat, caking coals, I suppose that there may have been at one time a great growth of marine plants during the deposition of the Denovian formation, and now produces the enormous flowing wells of Oil Creek; hence I kept a steady eye on each layer as it presented itself to me in exposed places, in hopes that the stony book of God, whose pages might be the truer authentic in the case, should reveal to me in a suit of fossils the cause of rock oil, so deep and so far from the coal fields, and yet so distant from the northern outcroppings of the flag stones.

And I am happy to state that the result of my investigations have far exceeded my anticipations; for I found a great profusion of impressions of marine plants embedded in the gray micaceous slabby sandstones along the edge of the base of the hill in the valley of Oil Creek from the Stackpole Farm, about 2½ miles below Titusville, down to the mouth of Cherry-tree Run. This fact encouraged me to make a re examination on the waters of Big French and Le Boeuff Creeks, when I found on Le Boeuff Creek the lowest oil bearing sandstones capping the hills in the vicinity of the town of Waterford; and on Big French Creek where I made the diagram, Fig. 2, discovered the siliceous oil bearing mud G, filled with stems of marine plants called *fucoids*. Now if we could follow the bed G to its deep

* GEOLOGICAL REPORT OF PROF. RIDGEWAY.—We have delayed for two or three weeks the publication of the Geological Report of Prof. Ridgeway to ascertain the cost of cuts, and, having ascertained that it would not pay, we give the report to our readers this week without the cuts. We have no doubt it will be read with much interest and no little profit to many oil men. Prof. Ridgeway would gladly have made a full survey of the oil region, but, unsupported by those peculiarly interested, he could not afford it. We hope oil men will perceive from the brief report the Professor has given, the advantages to be derived from a full and careful survey of the whole district.—*Titusville Gazette*, July 10.

pool below the Valley of Oil Creek, we would behold a sheet of oil which no doubt exists there and is the result of fermentation from a large mass of marine plants, that at one time grew upon the spot or were worked by the waters from the shores of the basement of the ocean into this shallow basin to be endured in the siliceous bed of mud far away from the edges of the shore of the sea.

The impression of marine plants from Oil Creek, now in my possession, are of a family of plants that once existed, flourished and died at a long period of time before the vegetation which now forms the coal beds. They are unlike the vegetable impressions found in the accompanying shales and clays associated with beds of coal. They are plants some of them 2½ inches in diameter, which grew on the upper floor of the Devonian formation, when the beds of sandstone and shale were lain down by salt water current; the sandrock there being sand and the shale mud, which caught and filed away in the secret chambers of the deep, every new growth from the siliceous mud G up to the group of soft brown sandstone, R R Fig. 4.

The climate was so hot during the age of marine vegetation and the growth so rapid and rank, caused by the supposed large amount of carbonic acids and hydrogen gas then pervading the atmosphere, or the conditions of the face of the earth during the Devonian period produced plants containing less carbon and more hydrogen than a later period of the coal plants. Had the marine plants taken up more carbon and less hydrogen, then these same plants may have produced seams of coal, by fermentation, instead of rock oil. The fermentation no doubt took place at some depth below the shallow ocean, as there is a large amount of carburetted hydrogen gas ejected at the present day from all the flowing wells. Hence the origin of rock oil of Oil Creek Valley, Pa., where it now exists in the recesses of the earth found in all the layers below the valley of Oil Creek down, down, down to where there is a great pool of oil beneath, whose specific gravity is lightest the deeper the drill penetrates the rocks and when struck projects a column of oil 150 feet high, and the golden spray in its descent covers the green foliage of the valley, a large per centage of it finding its way to Oil Creek, floats upon its bosom whose iridescent colors, reflected by the sun, cause a gorgeous scene from one end of the valley to the other.

All pumping wells of moderate depth have heretofore and do at present suck up oil from strata where the vegetable matter was sparse, and when any pumping well proves to be a good one, say 30 or 40 barrel well, the oil evidently comes from vertical or horizontal fissures in the rock.

During my examinations I found some parties engaged in drilling, who drive iron pipe (a process which obviates boring through and and gravel to the rock) down to an opening in the strata to the depth of 160 feet before they struck rock, whilst their neighbors, only a few feet distant on the same level, struck the regular, nearly horizontal, strata at the depth of 30 or 40 feet. These fissures or openings in the strata in the valley are always found filled with sand, pebbles and gravel the of the Drift formation C which at one time swept over the northern portion of our continent and was swept into the opening A, therefore they can not be supposed to contain any quantity of rock oil when they extend up to the surface filled with pebbles and gravel as represented in the diagram: but a fissure when struck below at a considerable depth, where the pebbles

and gravel could not enter, they are partings filled with oil affording a temporary flow of oil or a good pumping well, as at F F F. On Samuel Mackintire's farm, one and a half miles west of the Rynd farm, there is one of these vertical openings A in the strata on the hills where a man can walk in an upright position for the distance of 170 feet and look up 75 feet high. Similar openings may be seen near the Pit Hole, one of the tributary streams of the Allegheny river.

Fig. 4 represents a geological section from the out-croppings of the lowest portion of the oil-bearing rocks in Erie county to the mouth of Oil Creek whose course is nearly north and south. Although there is a slight inclination of the strata in a southerly direction, yet it may be considered a sinclinal shallow basin which was very little disturbed from its original position, save by the gentle, molten, igneous waves beneath the crust of the earth whose axial wave lines curved across the bearing of the original depression, swelling up Chestnut ridge so as to cause the group of oil strata to incline at a higher angle in a southerly direction of about 12° from the horizon down Oil Creek to Centerville. There is a slight swell or anticlinal axis in the range of hills back of Titusville, and I suppose that there is a sinclinal trough covered up, beneath the town of Titusville, with draft and alluvial, for the shale here below the third sandrock (so called) appears to be double the thickness found at its out croppings, that is, agreeable to the drillers' reports on Watson's Flats.

I must infer that there is a slight down throw here, for there is another swell or axial wave in the strata in the first range of hills immediately south of Titusville and crosses at the lower mill dam near the Stackpole farm. From this point down stream there are crimps in the strata caused by the dynamical force from a northeasterly direction produced by the plutonic wave lines curving and dying out when the Devonian was elevated.

There are also down throws of strata into the valley below the alluvial and draft and are visible at points where side streams enter from the N. E., they should be avoided in drilling for oil.

There is still a perceptible inclination of the strata in a southerly direction to the Beaty farm, the stream cutting and washing away the layers step-like all the way from Riceville to this point. From the Beaty farm down stream there is scarcely any perceptible inclination of the strata but an apparent level to the mouth of the Creek, except a rod above the mouth of Cherry tree Run, crossing the stream through the lower part of the Blood farm and a swell through the Graft and Hassan estate. The Phillips well being in about the center of the level position of the depressed pool containing the present flowing wells.

Phillips has now a well that will yield at least two thousand barrels per day, and this oil is eagerly sought for by foreign shippers.

And one of the most beautiful physical geological features here is the crescent-shaped form of the hills on the S. W. side of the stream on the Tarr Farm or Petroleum Center, the result, I suppose, of Cherry tree Run axial wave line immediately below, causing a sort of breast work to dam the oil. The Phillips well has been flowing for three months, a continuous stream of oil from 500 to 600 barrels per day, and is lead from the well by two iron pipes to the tanks, the only instance I saw in the valley.

There are thirty-one flowing wells from the mouth of the creek up to the distance of eight miles, yielding in the aggregate about 4,000

barrels of oil per day, an oil of a deep green color containing a large amount of benzole entirely different in this respect from coal oil.

As an additional proof of the great pool below and that the Tarr farm at Petroleum Centre is in the center of this pool, the Phillips well is 460 feet deep, and below this well down stream other flowing wells are deeper; the Brawley flowing well near the mouth of Cherry Run, on the Buchanan farm, is 503 feet deep, and the Cornwall well, a flowing one, on the Platt farm is 530 feet deep, and above the Furtig well, which is also 460 feet deep, the diggings are deeper, the Avery well being upwards of 700 feet deep, and I suppose that the drillers will have to sink from 1,000 to 12,00 feet deep in the vicinity of Titusville to obtain the same result.

REGENERATING STEAM.

This difficult problem has been solved. Messrs. J. Imray and P. Pigna, the one an English and the other an Italian engineer, both names comparatively unknown to fame, claiming the merit of having in "the steam regenerator" introduced to the scientific world an apparatus which has achieved a desideratum which has so long been looked forward to in vain. The main principle in this invention consists in the exhaustion of the steam into a surface condenser of peculiar construction, instead of to waste against the pressure of the atmosphere, as in the present mode of working steam engines. The water which results from this condensed steam is pumped into a feed water vessel, whence it flows into the boiler at a temperature of from 70 to 80 degrees. The effect of this arrangement is in the first instance to prevent the waste of steam, and thus, indirectly, to effect a considerable economy in fuel. By constantly employing the same steam, the feed-water, which usually exceeds 25 gallons daily per horse power, is reduced to just so much as is required to make up for the unavoidable leakages at joints, packings, and valves, and causing a proportionate reduction of boiler surface and capacity. A further advantage is that as the feed-water is not only supplied at a heated temperature, but in a state almost pure, being distilled by its continual circulation through the condenser, there are no sudden changes of temperature, and, consequently, little or no deposit or incrustation on the internal surface of the boiler, the presence of which occasions unequal wear, burning, scaling, and sometimes explosion. The reduction in the requirement of feed-water, an increase of effective steam pressure caused by the vacuum formed in the condensing receiver, and the avoidance of incrustation in the boiler, conduce likewise to considerable economy in that most important item, fuel; the saving, according to another estimate, four tons of coals per horse power annually. Added to these advantages there are those of decreased weight and bulk of boiler and cheapness in the application of the invention, the total expense of fitting these "regenerators" to ordinary steam engines being estimated at not more than about £2 per horse power. The invention it appears has been for some time in successful operation at several engineering establishments in France, and is now applied to the steam engine which works the machinery at Messrs. Collinge's axle factory in the Westminster bridge road, with results, as stated by the principal of that firm, quite equal to those claimed for it by the inventors.

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	R to Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	64	48	\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.	64	380	13,111,800	10,781,833	566,070	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do										"	700,000	6	95	1885	
do do										"	1,125,500	6	90	1875	
do do										"	1,000,000	6		1867	
do Washington Branch.....	Md.		30	1,650,000						1st Mortgage	791,000	7	55	1866	
Bellefontaine and Indiana.....	Ohio & Ind	118	118	1,859,813	1,256,750	139,120	314,090	8,795	Dec. 1860.	2d "	160,000	7		1870	
do do															
Buffalo and State Line.....	N.Y. & Pa.	132	68	1,950,950	1,040,000	27,511	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.		75	1,101,432	1,428,000		104,860	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	132	96	3,798,400	8,800,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	367,000	6	100	1864	
Central Ohio.....	Ohio.		137	In hands of Receiver.	3,673,000	1,126,438	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7	62	1861	
do do										1st "	800,000	7	80	1864	
do do										2d "	800,000	7	64	1865	
do do										3d " S. F.	950,000	7		1865	
do do										4th " S. F.	1,365,800	7		1878	
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	100	1865 & 1870	
do do										2d "	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.		222	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7			
do do										2d "	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report	received.					3d "	1,000,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		194	2,897,756	7,335,493	50,326	720,705	230,119	Apr. 1, 1861.	2d "	200,000		41		
do do										Pref 1st Mor. & S. F. Gen'l 1st Mortgage.....	1,250,000	7	80	Feb. & Aug.	
do do										2d "	3,600,000	7	48	Feb. & Aug.	
do do										2d "	2,000,000	6	26	May 1.	
Chicago and Rock Island.....	Ills.	52	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	103	1870	
Chicago, Burlington and Quincy.....	"	78	138	4,669,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	100	1883	
do do										2d " S. F.	812,000	8	108	1880	
do do										1st Mor. Chi. & Aur.	39,000	7		1867	
do do										2d "	303,000	7		1869	
do do										1st " Cent. Mil. Tract	39,000	7		1864	
do do										2d "	245,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	99	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	950,000	7	100	1880	
Cincinnati, Wilmington & Zanesville ..	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
Cleveland and Mahoning ..	Ohio.	68	161	1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income	305,500		80		
do do										1st Mortgage.....	850,000				
do do										2d "	499,000				
Cleveland and Pittsburgh.....	Ohio & Pa.	22	196	In hands of Receiver.	4,918,325	653,821				3d "	341,000		100	1860	
do do										1st Mortgage M. L.	80,000		91	1873	
do do										2d " M. L. or 1st Ex.	1,188,000		80	Feb. & Aug.	
do do										3d " 2d Ex.	1,165,000		64	1865	
Cleveland and Toledo.....	Ohio.	48	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	4th " 3d Ex.	1,154,000		65	1867	
do do										1st Mor. Jun. 1st Div.	359,000		65	1872	
do do										1st " " 2d Div.	263,000		75	1862	
do do										2d "	265,000		75	1862	
do do										1st " Tol. Nor. & Clev	521,000		75	1863	
do do										2d "	293,300		75	1861	
do do										Junction Income.....	44,500			1862	
Cleveland, Columbus and Cincinnati..	Ohio.	123	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	C. & T. Income.....	300,000			1864	
Cleveland, Painesville and Ashtabula..	"	125	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	519,000		99	1864 & 1890	
do do										1st Mortgage.....	564,000			1861	
Columbus and Xenia.....	Ohio.	105	54	1,490,000	290,700	50,500	See L.	Miami.		2d "	303,000		92	1862	
Columbus, Piqua and Indiana.....	"		103	In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	Dividend.....	274,700			1860 to 1866	
Dayton and Michigan.....	"		142	2,176,666						1st Mortgage.....	300,000	8			
do do										2d "	2,212,000	8			
Dayton and Western.....	Ohio.		38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000		50	1875	
Detroit and Milwaukee.....	Mich.		186	No report						1st Mortgage.....	2,500,000	7		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.		111	No report						2d "	1,000,000	8			
Dubuque, Marion and Western.....	"		51	No report											
Eaton and Hamilton.....	Ohio.		36	469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.		132	966,061	1,219,100	249,868	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d "	184,000				
Galena and Chicago Union.....	Ills.	70	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000		104	1862 & 1863	
do do										2d "	1,520,000		100	May 1, 1875	
Great Western	Ills.		175	1,600,000	2,391,000		435,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.		84	400,000	No report										
Greenville and Miami.....	Ohio.		32	300,000	473,000	75,000	63,141	13,573		Land Mortgage ...	5,000,000		26		
Hannibal and St. Joseph.....	Mo.	206		1,041,026	10,351,000	220,306	996,907	512,933	Sept. 1, 1860.	Mortgage Conv.	1,354,000		30		
do do										1st Mortgage.....	927,000	6	99	1873	
Hartford and New Haven.....	Conn.		62	2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	4,000,000	7	108	1860 & 1870	
Hudson River.....	N. Y.	47	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	2d "	2,000,000	7		180	
do do										3d "	1,840,000	7		1875	
Illinois Central.....	Ills.		57	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional Construction.....	12,885,000		64	1868	
do do										"	4,115,000		96	1875	
do do										Debentures.....	42,740				
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000				
do do										2d "	578,000	10			
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,284	140,689	448,858	230,834		Income.....	38,700				
do do										1st Mortgage.....	500,000		85	1866	
do do										2d "	400,000				
Indianapolis Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort.....	200,000		85		
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			1st Mortgage.....	649,984		68		
Iron.....	Ohio.		13	118,865	50,000		No report			2d "	314,000				

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.		86½	\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st	249,000	7	75	1861
do										2d	392,000	7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.		99	Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st	260,000	7		
do										2d " Conv.	1,000,000	7		
do										3d	600,000	7		
La Crosse and Milwaukee.....	Wis.		300	In hands of Receiver.						1st Mortgage E. D.	903,000		89	
do										2d " E. D.	1,000,000			
do										1st Land Grant W D	4,000,000		21	
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report		June 30, 1861	1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.		29	514,433	130,000		103,914	42,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1863
Little Miami.....	Ohio.	100	65				1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000			
Louisville and Frankfort.....	Ky.		65	1,169,59	384,519		245,910	98,679	June 30, 1861	1st Mortgage.....	248,000			
Louisville and Nashville.....	Ky.		268	5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st Mortgage.....	2,000,000	7		
do										1st " Lebanon Br.	400,000			
Louisville, New Albany and Chicago..	Ind.		288	2,500,000	3,000,000	200,000	645,827	371,402		1st " Memphis Br.	500,000			
do														
Madison and Indianapolis.....	Ind.		87	1,648,050	1,285,300	87,969	230,563	90,080	Dec. 31, 1860.	1st Mortgage	600,000	7		1861
Marietta and Cincinnati.....	Ohio.		208	8,561,213	190,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868
do										2d	2,000,000	7		
do										3d	1,500,000	7		
do										Sterling Income..	313,000	4		
Michigan Central.....	Mich.		63	6,057,784	7,968,429	125,000	2,126,699	910,169	May 31, 1861	Domestic	928,617	6	98½	1872
do										1st Mortg' Sterling	467,483	8	84	1869
do										1st " Conv.	500,000	8	96	1800
do										1st " unconv.	250,000	8		1869
do										1st " Dollar Conv.	2,538,000	8	106	1869
do										1st " S. F. Conv.	4,153,000	8	108	1882
Michigan South'n & North'n Indiana	Mich &		27	9,018,200	9,714,704	437,886	2,075,459	1,039,629	Mar. 31, 1861.	Mort. Mich. S.	991,000	99		1860
do										" Nor. Ind.	985,000	103		1861
do										" Goshen Line..	1,168,000	100		1863
do										" S. F. Toledo	2,850,000	84½		1877
do										2d Mortgage	2,465,000			
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d	200,000	7		
Milwaukee and Horicon.....	Wis.		42	1,101,200						2d	420,000	8		
do										2d	600,000	7		
Milwaukee and Prairie du Chien.....	Wis.	32½	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	8		1891
Milwaukee and Western.....	Wis.		71	No report										
Mississippi and Missouri.....	Iowa,		35	No report						1st Mortgage Conv.	1,000,000	7	96	
do										2d	400,000	8		
do										Oskaloosa Div.	1,425,000	7		
New Jersey.....	N. J.		34	4,397,808	688,000		992,767	579,981	Dec. 31, 1861.	Land Grant.....	7,000,000	7	102½	
New Jersey Central.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	Mortgage.....	711,000			
New York and Erie Pref.....	N. Y.	65½	35½	Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860.	1st Mortgage.....	3,000,000	108		
do										2d	4,000,000	103		
do										3d	600,000	104½		
do										4th	4,900,000	91½		
do										5th	1,792,500	82½		
New York and Harlem Pref	Conn.	38½	138	5,717,190	6,055,752	.....	1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	105½	1873
do common		15								2d	1,000,000	7	101	1864
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7	94	Dec. 1, 1866
do											972,000	6		Oct. 1, 1875
New York Central.....	N. Y.		92	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,925,000	101		May 1, 1883
do										Mortgage.....	3,000,000	7	103	June 15, 1864
Northern Central.....	Md.		138	2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,076,500	6		1885
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6		
Ohio and Mississippi, Eastern Div....	Ohio & Ind		192	Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500			
do										3d	316,995			
do										Construction.....	4,637,920			
Ohio and Mississippi, Western Div....	Ills.		148	.....	3,292,403		No report			Income.....	3,591,185			
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000			
do										" S. W.	2,800,000	6		
Pennsylvania.....	Pa.		359	13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	Construction.....	4,500,000	6	104½	1888
do										1st Mortgage Conv.	4,905,000	6	98½	1875
do										2d	2,319,000	6		1875
do										2d " Sterling.	1,937,440	6		
Peru and Indianapolis.....	Ind.		74	1,100,000	820,000	80,000	No report			State Works.....	7,200,000	5	89	
Philadelphia, Wil. and Baltimore.....	Del.		98	5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage	2,300,000	6	99½	1894
do										Improvement.....	119,000	6		1863
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,313	761,555	June 30, 1861	1st Mort. O. & P.	1,000,000	7	94	1865
do										2d	750,000	7		1866
do										1st " O. & I.	1,000,000	7		1872
Pittsburgh and Connellsville.....	Pa.		49	1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	2d	280,000	7		1873
Racine and Mississippi.....	Wis.		104	2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.	Pittsburgh Subs'n.	500,000			
Sandusky, Dayton and Cincinnati..	Ohio.		170	2,697,000	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856
do										"	997,000	7		1866
do										"	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.		125	818,774	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886
Seaton and Rocking Valley.....	Ohio.		56	401,975	500,000	100,000	110,260	53,100						
Springfield, Mt. Vernon & Pittsburgh..	Ohio.		50	1,000,000	1,650,000	200,000				1st Mortgage.....	500,000			
do										2d	450,000			
Steuenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d	900,000	7		1865
Terre Haute, Alton and St. Louis....	Ills.		208	No report						1st Mortgage Conv.	1,000,000	7	110	1862
do										2d " Conv.	2,000,000	7	83	1868 & 1870
do										1st " Bel. & Ill.	517,000	7		1873
Terre Haute and Richmond.....	Ind.	100	73	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	200,000	7	92	1866
Toledo, Wabash and Western.....	Ohio & Ind		243	2,123,506	5,090,049	52,389	433,545			1st Mortgage.....	3,400,000	7		Aug. 1, 1865
do										2d	2,500,000	7	64½	Nov. 1, 1878
do										Mort. Coupons....	96,049	7		1860 to 1865

On Saturday a number of scientific gentlemen were invited to Messrs. Collinge's to witness some practical experiments in the working of the apparatus; the result of which, as regards increase of power, was that with their engine, which is one of twelve horse power, upon the high pressure principle, 50 strokes per minute were obtained with the "regenerator" attached, against 32 strokes per minute when working in the ordinary way. It was further stated that experiments previously made showed the gain by its use to be equivalent to 42 2 per cent, and the saving in fuel as between 47 cwt. and 68 cwt., in the 60 hours.

STEAM FIRE ENGINES.

We reproduce as a matter of general interest the following description of a London Steam Fire engine, copied after the model of our engines.

The carriage consists of a strong wrought iron frame of a novel form, pivotted upon a wrought iron fore carriage, to prevent straining in passing over uneven roads; an arched recess in the side frames permits the locking of the fore carriage as may be required. The wheels are large, especially the hinder ones, and the carriage is hung upon springs, so as to be well adapted for quick traveling. Between the hind wheels is placed the upright multitubular boiler, $\frac{1}{2}$ inch Bessemer steel plates, within which are a number of vertical copper tubes; the outermost circle of these tubes descends from the tube-plates into the fire box; an internal tube, open at both ends, descends nearly to the closed bottom of each of the former, by means of which a perfect automatic circulation of the water is obtained, resulting in the rapid generation of steam, with a certainty of never priming, or of any deposit in the tubes. The rapidity of circulation throws all foreign matter over into the outer jacket, from whence it is easily removed. The upper part of the boiler, or steam chest, is fitted with strong wrought iron tubes for carrying off the smoke and creating a draft, which tubes act as strongly as stays; the outer jacket is well and frequently stayed, so as to be perfectly safe under very high pressure. As the copper tubes are not fixed at their lower ends, and the upper tubes are of iron, no unequal expansion takes place, and leakages are avoided. The boiler is well provided with all the usual requisites for safe working, viz., two safety-valves, gauge-cocks, gauge-glass, pressure-gauge, blow-off cock, etc.; it is fed by a Giffard's Injector, drawing water from a feed cistern supplied by the pump. The boiler is jacketed with felt to prevent radiation of heat, cased with sheet-iron and brass-banded. Steam is taken from four points, and supplied direct through the valve-chest to the cylinder. The steam-producing power of the boiler is of a very high order, as was shown at the late public trial, when the boiler (perfectly cold, not having been used for some days) was supplied with cold water from the Serpentine, and the fire lighted; in six minutes steam was heard issuing from the cocks.

Min.	Sec.	steam pressure per square inch.....	5
11.74		"	10
8		"	20
9		"	30
9 1/2		"	40
10	5	"	50
10 1/2		"	60
10	50	"	70
11	10	"	80
11	25	"	90
12	40	"	100
11	50	"	

The time was carefully noted by a stop watch made expressly for trying experiments.

Immediately in front of the boiler is the steam cylinder 9 in. in diameter, fitted with equilibrium piston valves; a connecting rod from the piston-rod to a lever pulls the side-valve over the summit of a double inclined plane, when its further traverse is effected by a coiled spring. By means of this simple arrangement no fly-wheel being required, a uniform speed of piston throughout its stroke is produced, and any required speed from two up to 150 or 160 double strokes per minute can be obtained at pleasure. In front of the steam-cylinder there is a horizontal double-acting pump $6\frac{1}{2}$ in. diameter, 15 in. stroke, the piston-rod of which is coupled direct to that of the steam engine; two stout rods connect the steam cylinder and pump together, and take the whole of the strain. The suction and delivery valves are placed in easily accessible valve chambers below the pump barrel, and as the piston passes beyond the ends of the barrel at every stroke, any grit or foreign substances drawn up with the water are at once ejected, and the pump preserved uninjured. The want of lubrication has hitherto been a great drawback to the employment of this kind of pump; Messrs. Merryweather and Son have got rid of this objection by using a double piston with an intermediate oil chamber, which lubricates the pump-barrel continuously. At one end of this stroke this oil chamber comes under an orifice through which oil can be supplied from time to time as required. From the form and position of the valve chambers no water can remain in them to become frozen, a great advantage in cold countries. Hand-holes at each end of the pump afford ready access to the valves in the event of derangement. Above the pump there is a capacious air vessel, controlling the delivery; at the side there is also a suction air-vessel. On each side of the engine there are screws for the attachment of delivery hose, provided with sluice cocks for turning the water on or off to the one or two lines of hose. Over the pump there is a box for containing the hose and implements, which also forms the seat for the driver and five firemen. The engine, with its equipments, is drawn by a pair of horses at a good speed. The manageable character of this engine was well shown at the late trial at Hyde Park, when it commenced working with a $1\frac{1}{2}$ inch hose-pipe, and was at work for some few minutes, during a portion of the time, filling one of the measuring tanks (before either of the other competing engines commenced working). By way of experiment, the jet was then changed to $\frac{1}{2}$ inch, to show that the engine would work at a slow speed, through which it continued working for some time, and then returned to the larger jet. With reference to the remarks in our last number, relative to the side-valve, we are assured by the makers that it requires very little power to work it while the steam is on—that in fact, a child could work it, and that there is no uncertainty in the working parts, which are all made strong enough for the rough usage that fire engines are necessarily exposed to. At the late trial, while the engine was in full work, some person inadvertently shut down the sluice-valve, and the sudden excessive strain thus thrown upon the delivery main caused the brazing of a joint to open, and rendered the continuance of quantitative competition inexpedient, although the engine continued working effectively as long as the others. It was justly remarked by many present that,

prior to this accident, the engine was working very successfully.

It is stated that the performances of this engine at former trials have been as follows:

A	1 1/2 in. jet projected 150 ft. high, and 100 ft. horizontally	157 ft.	202 ft.
" 1 1/2 "	"	170 ft.	215 ft.
" 1 1/2 "	"	150 ft.	160 ft.
Two 1	"	"	"

THE PACIFIC RAILROAD IN CALIFORNIA.

The passage of the Pacific Railroad Bill by Congress was celebrated in California on the 10th ultimo in San Francisco in a style which showed their appreciation of this important measure. There was a grand torchlight procession by the firemen, and a general illumination of the city. Among the transparencies were the following:

"San Francisco the jumping-off depot! Thus far and you must take to the water! The waste places shall be made glad! The wilderness shall blossom as the rose!" "American iron only to be used!" "Cheap homesteads along the route! Alternate sections beside the railway only one dollar and a quarter per acre!"

"Long live our Republic! The government gives \$80,000,000 toward the building of the Grand Trans Continental Railway."

"The Cable proved a fable. The railroad is sure; when built, it will endure!"

"Little Indian Boy, step out of the way for the Big Engine!"

"Fresh No. 4 Mackerel, six days from Belfast. Chesapeake Bay Oysters, six days from the water!"

"Now time and space are in the race! San Francisco in 1862, 100,000 inhabitants! San Francisco in 1872, 1,000,000 inhabitants! San Francisco in 1882, \$55,000,000 assessable property. San Francisco in 1872, \$500,000,000."

"The iron of the East (painted clasped hand), the Gold of the West."

"Westward the march of Empire streams its way."

"The Locomotive—His prow is wet with the surge foam of either Ocean. His breast is grim with the sands of the Desert."

"From New York to San Francisco—By the Horn, sixteen thousand miles! By the Isthmus six thousand miles! By the railroad, three thousand miles!—From New York to San Francisco—By the Horn, one hundred days! By the Isthmus, twenty-five days! By the Railroad, four days!"

"The Pacific Railroad—Uncle Sam's Waist-band. He has grown so corpulent that he would burst without it!"

"No need for thy elephants, O Siam! It follows the track of the buffalo!"

"A long twilight when coming west; a quick daybreak when going east. Score up your longitude, Mr. Conductor!"

"Cape Horn be blowed—Salt Lake City the Half-way House; Brigham Young, Esq., Major Switch tender."

"Married—In June, 1862, by the High Priest of North America, Mr. Atlantic to Miss Pacific, all of the same nation."

"Hurrah for the land where the moor and the mountain
Are sparkling with treasures no language hath told;
Where the wave of the river and spray of the fountain
Are bright with the glitter of genuine gold."

"In one decade the road is made."

"From Season to Season, on the same parallel, a Thousand miles as one day."

"The American Union—From Sea to Sea, clasped by bands of Iron and hooks of Steel."

MONETARY AND COMMERCIAL.

We have but little change to note during the past week. The weather has been oppressively and intensely hot and there has been a disposition to do as little as possible. The general tone of the money market is more hopeful. This is brought about by the fact that the President has called for a large army. That the first call for 300,000 men is now about filled without the necessity of resorting to a draft and it is altogether probable that most of the States will be able to fill the requisition on the second call for 300,000 by volunteers if a short time is allowed. We are also pretty accurately informed that although the Confederate army was apparently victorious in the recent series of struggles before Richmond, yet, their boasted victories were, in reality, a series of bloody defeats which they can not afford to repeat. The alacrity with which the people of the North have again sprung to arms to fill up the army gives confidence in the stability of the government and its ability to crush the rebellion.

As has been the case for the past year money is abundant on undoubted securities at low rates. There is little demand for business purposes, solvent houses preferring to risk only their own capital. We quote rates at 6 to 8 per cent. for gilt edged names and 8 to 10 per cent. for first class. Lower grades cannot be negotiated. Gold and silver are not in as great demand and are lower. We quote rates as follows:

	BUYING.	SELLING.
New York	$\frac{1}{2}$ dis.	par
Boston	$\frac{1}{2}$ dis.	par.
Philadelphia	$\frac{1}{2}$ dis.	par.
Baltimore	$\frac{1}{2}$ dis.	par.
Gold	12 prem.	14 prem.
Silver	5@6 prem.	8@10 prem.
Demand Notes	5 prem.	.....

Much inconvenience has been experienced from the scarcity of small notes. It is said the banks are withdrawing them from circulation on account of fearing a tax upon them.

The following table shows the size and description of the stamps and notes of all denominations issued by the government.

Denom.	Size in in.	Vignette.	Color.
5 cents	1 $\frac{1}{2}$ by 2 $\frac{1}{2}$	5c P. O. stmp.	brown
10 "	1 $\frac{1}{2}$ by 2 $\frac{1}{2}$	10c P. O. st.	green.
25 "	1 $\frac{1}{2}$ by 3	Five 5c. P. O. st.	brown.
50 "	1 $\frac{1}{2}$ by 3	Five 10c. P. O. st.	green.
1 dollar	3 by 7 $\frac{1}{2}$	Chase	bl'k and gr'n.
2 dollar	do	Hamilton	do.
5 "	do	Figure 5	do.
10 "	do	Spread eagle	do.
20 "	do	Female standing	do.
50 "	do	Hamilton	do.
100 "	do	Eagle flying	do.
500 "	do	Washington	do.
1000 "	do	Chase	do.

The small change notes will be printed about the first of next month, and will be delivered in sheets as follows:

A sheet of	5 cent notes will be	1 dollar.
"	10 "	2 dollars.
"	25 "	4 dollars.
"	50 "	8 dollars.

These notes or stamps can not be used in prepaying postage on letters.

It is said that in arranging the new denominations, great care has been taken to guard against counterfeiting. The stamps are re-

deemable in the new Treasury notes in sums of \$5 and upwards, and the Treasury Notes in their turn are fundable in United States 6 per cent. stocks.

The New York Tribune of Monday says:

"Wall street is in one of its sensitive moods to-day. Since the memorable Merrimac raid, 'Rams' have been held in appropriate horror, and the news of the destructive engines fitting out and ready in foreign and southern ports has alarmed some timid shareholders; this, with considerable realizing yesterday, has produced an irregular market. Later a counteracting influence appeared in the significance of the Government orders relative to drafting, and the care to be taken of the Semi-Secessionists infusing by its determined spirit a confidence long needed. The last foreign arrival adds strength, intimating a check to the slaughtering of American securities and a desire to leave balances on this side for investment purposes. It is a coincidence of note, in connection with the speculative mania now so prominently exhibited, that abroad, Money being of no further use in legitimate trade, at a rate of 1 $\frac{1}{2}$ @2, is finding its way into the London Stock Exchange, in purchases of investments and speculative shares, producing an 'unprecedented' speculative spirit."

Gold in New York is quoted at 112 $\frac{1}{2}$ to 112 $\frac{3}{4}$. The whole export by Saturday's steamer was \$654,000 against \$2,500,000 four weeks ago. Money is abundant at 4 to 5 per cent.

The river is very low and none but the smallest draft boats are now running. This, together with the heated term which has been fairly upon us, has made business quite dull. Flour is in demand by army bakers. It rates as follows: Superfine \$4 to \$4 05. Choice brands \$4 10. Extra family \$4 25 to \$4 50. Wheat was down to 75 to 80c. for red, and 85 to 90c. for white, but towards the close gained 5c. Corn is quoted at 35 cents and rye at 60 cents. Oats are firm at 41 cents. New barley sells at 72 to 75 cents.

In the District Court of Philadelphia last week, Judge Hare delivered an opinion in a suit brought in that court, which is of some interest to capitalists. Its points are thus sketched in the *Philadelphia Ledger*:

The case involved the questions of the Congressional legal tender notes in the liquidation of a bond stipulated to be paid on a given day in specie, current gold and silver money of the United States, with half-yearly interest in the same currency. The bond was in due form throughout, and judgment was entered upon it in the usual way. When the day of payment of this judgment arrived the defendants tendered to the plaintiffs the debt, interest and costs in full, in the notes of the United States, which by act of Congress of Feb. 25, 1862, were made a legal tender for the payment of all debts, etc. The plaintiff refused to receive them. The execution followed, in the body of which the Sheriff

is commanded to cause to be levied the amount of the judgment, "in specie, current gold and silver money of the United States." On this the defendant applied for a rule to show cause why the judgment should not be set aside. The court decided that the tender of the United States was sufficient answer to the obligation in the bond, and the writ was set aside.

The court founds its decision on the fact, that a judgment can not be entered and an execution can not be issued, for silver or gold, but must be for lawful money (it was granted that the United States notes were lawful money). The opinion grants the right of a plaintiff in a suit, upon an instrument for the payment of money in gold, doubloons, silver, Mexican dollars, etc., to recover the value at the time when payment of the debt should have been made; in other words, the premium on the gold etc., beyond the amount, as well as the amount specified in the evidence of the debt—so that the decision is virtually for the gold, etc. The plaintiff can go into the market and buy the gold, etc., with the premium he recovers, admitting that the premium was the same as when the debt was due.

The amount of paper issued and to be issued by the United States Treasury is as follows:

Under acts of 1861—5s, 10s and, 20s,—\$60,000,000. These were all issued. They are receivable for all public dues, including customs. As fast as they are paid in for customs, they are destroyed or canceled. About twenty-two millions of them have been so canceled to this date; the balance is available for future custom house payments. This is the only paper money importers can use for duties.

Under act of Feb. 25, 1862—5s to 1000—\$150,000,000; but as long as any portion of the above sixty millions was not redeemed, this issue should be restricted, so that the currency outstanding should not exceed the 150 millions.

There is now in circulation, issued under the above acts, 150 millions, less say ten millions on hand in the Treasury and various Sub-Treasuries.

Deducting ten millions on hand and thirty-eight millions old Demand Notes that have ceased being used for currency, and we find that the people are using 102 millions of Government currency.

Under recent acts the Secretary of the Treasury can, and is preparing to, issue stamp currency under

\$1, say	\$36,000,000
Do. of 1s 2s and 3s	35 000,000
Do 5s to 1,000s	63,000,000
And to prepare for use in case the temporary deposits are drawn out	50,000,000

This gives an entire volume of Government paper money of \$336,000,000, all of which is virtually and practically fundable into a 6 per cent 20 year Federal Stock, redeemable however, at the option of the Government, at any time after 1867.

—The coal transported over the Delaware Lackawanna and Western Railroad last week, was:

	Week. Tons Cwt.	Year. Tons Cwt.
Shipped North.....	8,846 16	180,130 14
Shipped South.....	20,399 11	435,293 08
Total.....	28,646 07	615,626 02

For corresponding time last year:

	Week. Tons Cwt.	Year. Tons Cwt.
Shipped North.....	5,997 06	147,563 04
Shipped South.....	21,574 08	506,467 12
Total.....	27,571 14	651,050 16
Decrease.....		35,924 14

—The earnings of the Michigan Central Railroad Company for the month of July were as follows:

1862.....	\$172,188 80
1861.....	123,377 39
Increase.....	\$48,811 50

—The Galena and Chicago Railroad Company earned in July:

1861.....	\$145,389
1862.....	190,971
Increase in 1862.....	\$45,582

The gain on the last week of July was \$6,860.

—The Chicago and Rock Island Railroad Company earned in July:

1862.....	\$114,057
1861.....	88,992
Increase in 1862.....	\$25,065

The last week showed an increase of \$7,107.

—The earnings of the Great Western Railroad for Canada for the week ending August 1, were:

Passengers.....	\$17,449 11
Freight and live stock.....	18,562 81
Mails and sundries.....	1,763 99
Total.....	\$37,775 81
Same time last year.....	27,393 24
Increase.....	\$10,482 57

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

through Distance 280 Miles;

42 Miles Shorter than any other Route
NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C., H. and D. Depot, at 7:30 A. M., 3:30 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without rebilling or transhipment.

JOHN BRANT, Jr., Superintendent

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent.

33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON, STOCK BROKER,

No. 21 West Third Street,
CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and takes collect

BUSH & LOBDELL, Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the
Most Reasonable Terms.

KNOX & SHAIN,

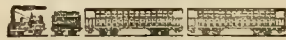
Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums by Franklin Institute.)

CHICAGO, GREAT WESTERN AND
NORTH-WESTERN LINE—INDIANA.
POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

CHANGE OF TIME.

On and after MONDAY, Nov. 11, 1861, THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other

FIRST TRAIN—5:50 A. M.—Chicago Mail—Arrives at Indianapolis at 9:35 A. M.; Lafayette, 1:40 P. M.; Chicago, 6:00 P. M.; connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—2:45 P. M.—Indianapolis, Lafayette Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis at 6:15 P. M.; Lafayette at 9:15 P. M.; Springfield at 5:20 A. M.; Quincy at 12:55 P. M.; Palmyra at 2:15 P. M.; St. Joseph at 12:30 A. M.; Atchison, K. T. 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20

THIRD TRAIN—5:00 P. M.—Chicago Express—Arrives at Indianapolis at 9:30 A. M.; Lafayette at 1:40 A. M.; Chicago at 6:00 A. M.; connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices at the Spencer House Corner, north-west corner Broadway and Front streets; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,

W. H. L. NOBLE,

General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,
my21 CINCINNATI

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

NEW YORK, BOSTON,
AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

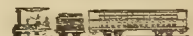
For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6.

CHARLES MINOT, Gen'l Sup't.

Baltimore and Ohio Railroad

RE-OPENED!



This great national thoroughfare is again open for

Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition, The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT

Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. F. SMITH, Master Transportation, Baltimore.

J. H. SULLIVAN, Gen. Ws. Ag't, Belaire, O.

L. M. COLE, Gen. Ticket Agent, Baltimore.

1861. 1861
FAST TIME.
LITTLE MIAMI
 (AND)
COLUMBUS AND XENIA
 AND
CINCINNATI, HAMILTON & DAYTON
RAILROADS.

On and after SUNDAY, Nov. 10, 1861, Trains depart as follows:

7:30 A. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Eaton, Richmond Indianapolis and West; Logansport and West; and Dayton. Connects at Dayton with Greenville and Miami Railroad, with Dayton and Michigan Railroad for Lima, Chicago and the West; Toledo, Detroit and Canada; with Sandusky, Dayton and Cincinnati Railroad for Sandusky, &c.

9:45 A. M.—Cincinnati Express.—From the Little Miami Depot. Connects via Columbus and Cleveland; via Columbus, Crestline and Pittsburgh, via Columbus, Steubenville and Pittsburgh; via Columbus, Bellair and Benwood; also, for Springfield; connects with Cincinnati, Wilmington and Zanesville Railroad.

9:00 A. M.—Accommodation.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty.

7:40 A. M.—Morrow Accommodation.—From Little Miami Depot.

3:30 P. M.—Accom.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Oxford and Liberty; connects to Connersville. Connects at Dayton with Sandusky, Dayton and Cincinnati Railroad for Forest. Connects with Greenville and Miami Railroad.

4:00 P. M.—Accommodation.—From Little Miami Depot. For Columbus and Springfield.

5:30 P. M. Express.—From Cincinnati, Hamilton and Dayton Depot.—For Hamilton, Richmond, Indianapolis, and West. Connects at Dayton, with Dayton and Michigan Railroad for Lima and Chicago, and for Toledo, Detroit and Canada.

5:50 P. M.—Accommodation.—From Little Miami Depot. For Xenia; connects with Cincinnati, Wilmington and Zanesville Railroad Freight and accommodation.

7:30 P. M.—Glendale Accommodation.

10:00 P. M.—Night Express.—From Cincinnati, Hamilton and Dayton Depot.—Connects via Columbus, Steubenville, and Pittsburgh; via Columbus, Crestline and Pittsburgh; via Columbus, Bellair and Benwood; via Columbus, Bellair and Pittsburgh, via Columbus and Cleveland.

Sleeping Cars on this Train.

Trains leave Dayton for the East, via Columbus, at 12:35 A. M., 11:30 A. M. and 5:45 P. M.

All trains run daily, Sundays excepted, except the Night Express, which leaves Sunday night in place of Saturday night.

For all information and Through Tickets, please apply at the Offices, south-east corner of Front and Broadway; west side of Vine Street, between the Post-Office and the Burnet House; No. 7 West Third Street; Sixth Street Depot, and at the East Front Street Depot.

All Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

P. W. STRADER,
 General Ticket Agent

Omnibuses call for passengers by leaving directions at the Ticket Offices.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
 No. 67 West 6th St. bet Walnut & Vine
 CINCINNATI O

W. MORRILL. G. B. BOWERS
MORRILL & BOWERS,
 (Successors to and members of the late firm of
 C. WASON & CO.)
CLEVELAND, OHIO,

Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men the West that all work furnished by us shall be of the best quality in style, workmanship and material.
 Orders respectfully solicited, with the assurance that pains will be spared to give entire satisfaction to all.

1862. 1862.
Pennsylvania Central R.R.
285 MILES DOUBLE TRACK.



(With its Connections)
 IS A FIRST CLASS ROUTE,
 FOR SAFETY, COMFORT AND SPEED,
 TO ALL THE EASTERN CITIES!
 THE TRACK IS STONE BALLASTED
 AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
 (with close connections from Western Cities,
 ALL CONNECTING DIRECT TO NEW YORK,

THROUGH PHILADELPHIA,
 AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
 ONE TRAIN RUNS DAILY (430 MILES.)
 VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
 BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.
 ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburg with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "PA. PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
 D. A. STEWART, Freight Agent, Pittsburgh.
 CLARKE & CO., Transfer Agents, Pittsburgh.
 R. C. MELDRUM & CO., Madison, Indiana.
 J. E. MOORE, Louisville, Ky.
 W. W. AIKMAN & CO., Evansville, Ind.
 R. F. SASS, St. Louis, Missouri.
 CLARKE & CO., Chicago, Illinois.
 W. H. & E. L. LANGLEY, Gallipolis, Ohio.
 G. B. NEAL, Parkersburg, Virginia.
 HALL & CO., Marietta, Ohio.
 H. S. PIERCE & CO., Zanesville, Ohio.
 McDOWELL & McCORM, Portsmouth, Ohio.
 R. McNEELY, Maysville, Ky.
 J. P. JOHNSTON, Ripley, Ohio.
 JOHN TODD, Covington, Ky.
 G. L. HEATON, Cleveland, Ohio.
 R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.
 ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
 L. L. HOUPPT, Gen'l Ticket Agent, Philadelphia.
 H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
 SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:30 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

**Cincinnati Hamilton and Dayton
 RAILROAD**

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day., Toledo & Day. Huntsville.....	5:20 P. M.	10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.

Eastern Night Express.....10:00 P. M. 5:40 A. M.
 The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Terre Haute and Lafayette and Chicago Mail.....	5:05 A. M.	11:10 A. M.
Indianapolis and Chicago Night Express.....	3:20 P. M.	11:50 P. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Evansville and St. Louis Mail.....	5:00 A. M.	10:05 P. M.
Ymours Accommodation.....	3:00 P. M.	8:15 A. M.
Evansville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES slower than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.
 P. W. STRADER,
 General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

W. H. L. NOBLE,
 General Ticket Agent Indianapolis & Cincinnati Railroad.
 E. F. FULLER,
 General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET
 NEW YORK.

ALBERT BRIDGES.

JOEL C. LANE

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES
Tube CLEANERS, Steel Wire and Whalebone BRUSH-

Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enamelled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warm-
ing Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Pia-
za Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.
Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,
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Railroad Machinery, Tires, etc.

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Railroad, near the center of the State, possess superior
facilities for forwarding their work to any part of the coun-
try, without delay.

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, AUGUST 21, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrangements are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	6.45 P. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.10 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	6.00 A. M.	5.40 A. M.
Bellefontaine Accommodation.....	5.20 P. M.	6.45 P. M.
Marionetta & Cincinnati—		
Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.
Ohio & Mississippi—		
Mail.....	5.00 A. M.	10.05 P. M.
Symour Accommodation.....	2.00 P. M.	1.15 P. M.
Express.....	5.00 P. M.	5.53 A. M.
Indianapolis & Cincinnati—		
Mail.....	6.00 A. M.	11.10 A. M.
Chicago Express.....	6.30 P. M.	10.00 A. M.
Dayton & Michigan—		
Tol. & Direct & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.
Kentucky Central— (City time.)		
First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marionetta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

THE RAILROAD STRATEGY OF THE WAR.

Whether the government has had any definite policy in carrying on the present war or not, it is not our province to discuss; but, as a Railroad Journal, we may be allowed some suggestions on the importance of railroad lines to both the parties interested in the great struggle now going on and the use to which they may be put in either prolonging the war or putting an end to the Rebellion. It needs no argument, to prove that lines of communication, easy, rapid and safe are of great importance to an army, and can not be overlooked in laying out the plans of any grand campaign. Of what immense advantage have we found the Ohio, the Mississippi, the Tennessee and the Cumberland rivers. Bearing our gunboats over their broad bosoms they have enabled us to sweep their banks of hostile armies and plant again the flag of the Union the whole length of their course. With the single exception of leaving Vicksburg uncaptured, the work of opening these rivers has been prosecuted to a complete success. We think leaving even a single exception is a mistake, which can only be remedied by capturing the rebel stronghold. And trust the work will soon be done. We see then the plan of opening the lines of communication by water has received early and apparently systematic attention, and its good effects are visible in the possession of the most important commercial points at the South.

In striking contrast with this very encouraging fact is the apparent total neglect of the lines of railroad communication extending through the interior of the States that are washed by the great water lines already mentioned. This brings us to the review of the whole system of railroads in the country.

FIRST—THE RAILROADS OF THE NORTH. The whole north is enveloped as with a net work of railroads spreading and ramifying in every direction and reaching almost every nook and hamlet north of the Ohio river. For the purposes of the war, however, they may be divided into four great east and west lines—1st. The great Lake Shore Line, extending from Chicago to New York substantially on the southern shores of the great lakes. 2d. The line extending through Peoria, Ft. Wayne and Pittsburgh to Philadelphia and New York with its modifications and ramifications to Chicago by the Pittsburgh, Ft. Wayne and Chicago Railroad, and to Springfield by the Great Western Railroad of Illinois. 3d. The route from St. Louis and Alton via Indianapolis and Columbus to Philadelphia and New York; and, 4th. The route from St. Louis via Vincennes and Cincinnati to Baltimore, Philadelphia and New York. On each of these routes a tolerably straight line could be obtained and each has its ramifications and branches, picking up the business of every section in its immediate neighborhood and

distributing it to either of the great marts that may be deemed advisable. These great lines, with the exception of the eastern portion of the last mentioned by the Baltimore and Ohio Railroad to Baltimore and Washington, have been in constant operation, and never, in a single instance, with this exception, has their business been interrupted by a hostile demonstration. The immense advantage derived from them has been shown in the rapid and safe transportation of hundreds of thousands of troops from west to east, and back to west again. In no case have rivers been called upon to do this duty when railroads to the points needed were open. The advantage of the possession of our northern lines of railroad to the government can not be disputed. With them it has rapidly massed large bodies of men at threatened points. They have been like the great muscles of the nation which brought into action the atoms of flesh composing the national body. There has, however, been one serious disadvantage in our system as established. The frequent changes of gauge have prevented anything like amassing the facilities of different roads for making enormous movements at one and the same time. This is the natural result of the rapid and independent construction of our roads at the north. Still such had been the requirements of commerce previous to the breaking out of the war, that this difficulty was being rapidly remedied, and has been much less serious than would seem at first sight. The experience of the war will, we think, demonstrate the wisdom of carrying out the plan of uniform gauges to the utmost practicable point.

SECOND—THE RAILROADS OF THE SOUTH. The railroads of the South present three great features—1st. A line running along the Atlantic and Gulf coast from Mobile to Richmond and thence to Acquia creek. This has its ramifications and branches and in some cases its parallel roads running again into the main stem. 2d. An interior line parallel to the above by the East Tennessee and Virginia Railroad and through Chattanooga and Huntsville to Memphis and New Orleans. 3d. The line from Louisville through Nashville to Chattanooga and thence to Charleston and Savannah on the one hand, and southwest to New Orleans and Mobile on the other.

These then are the strategic internal lines of communication of the Southern Confederacy, and while the Rebel Government is in secure possession of these, it can move its troops rapidly from New Orleans to Richmond, or from Savannah and Charleston to Tennessee and Kentucky. But there is one great feature in all these lines, the importance of which can not be overlooked—that is, they are all of a *uniform gauge*. A locomotive may start from Richmond and run over every mile of railroad now built in the Southern Confederacy. Hence we see that as the Rebel troops have retired from Kentucky and Tennessee they have carried *all* the rolling

stock with them to be used on their great lines of communication, and facilitate the movement of their troops. There is no necessity for surprise at the rapid concentration of a tremendous army at Richmond, gathered as it most probably was from every Southern State, in less than a week's time, and precipitated on the worn out army of the Potomac. And it will not be a matter of much surprise if large portions of the same army are precipitated upon our troops at the west, and gain temporary advantages which it will be out of our power to prevent.

In the whole campaign thus far we have seen no evidence of a systematic plan to cut these lines of railroad communication and thus prevent the sudden massing of the insurgent troops at distant and unexpected points. It is true, Gen. Mitchell with a bravery and forethought worthy of the distinguished engineer, made a dash some months ago at Huntsville and cut the interior line of communication, and since then Chattanooga has also been occupied. But this was rather the result of the intelligence and sagacity of a detached commander, than of any general plan that all our generals were striving to carry out. Had either Hunter or Burnside been enabled to cut the shore line in two at some strategic point, and a Union force one year ago sustained the brave patriots of Eastern Tennessee, and enabled them to interrupt effectually at their point the great interior line, the results of this summer's campaign might have been essentially different. The Rebel army of Virginia would have been compelled to rely upon its own resources, and the dispirited and broken troops of Beauregard at the west would have fallen an easy prey before the victorious army of Halleck.

We offer these suggestions not by way of criticising the action of the Government, but as presenting our views of the imperative necessity of recognizing the railroad system of the South as an immense engine in the hands of the Rebellion, which must be crippled before the war can be brought to a successful issue.

GALENA AND CHICAGO UNION RAILROAD.—This company have taken a perpetual lease of the Chicago, Iowa and Nebraska Railroad, and also of the Cedar Rapids and Missouri Railroad. This actually extends the road operated by this Company 122 miles beyond the Mississippi River to Otter creek, to which point the Cedar Rapids and Missouri Railroad is completed. It will soon be opened thirty miles farther to Marshalltown. The road bed is nearly ready for the iron and the contract requires this to be laid by July 1st, 1863. From thence it will soon stride to the Missouri River.

The railroads running out of this city have more freight offering than they can possibly carry.

CHICAGO, BURLINGTON & QUINCY RAILROAD.

The annual meeting of the stockholders of the Chicago, Burlington and Quincy Railroad Company was held at the office of the Company in Chicago, Friday, June 20th, 1862. John Van Nortwick was appointed Chairman, Willis E. Gilman, Secretary, and Edward L. Baker and John B. Colton, Tellers.

The report of the directors to the stockholders, also the several reports of the Treasurer, General Superintendent, and officers in charge of the different departments, were presented and read; and, on motion, accepted and unanimously ordered to be printed, with the accompanying tables of statistics and accounts, and that a company be sent to each shareholder.

The tellers reported that out of 47,915 shares of the capital stock of the Company, 38,613 shares were represented in person, and by proxy, by those present at the meeting.

The following was unanimously adopted, 38,597 votes being cast for it and none against it:

Resolved, That the contract between the Chicago, Burlington and Quincy Railroad Company, and the proprietors of the railroad extending from the Peoria and Oquawka Railroad, at Yates City, in Knox county, about thirty miles to Lewiston, in Fulton county, in the State of Illinois, executed as of November 6th, 1861, subject to the ratification of the stockholders, of this Company, at any legal meeting thereof, be and the same is hereby ratified and approved.

The following was also unanimously adopted, 38,613 votes being cast for it, being all the votes present:

Resolved, That the Board of Directors of this Company be and they are hereby authorized to construct a branch road from the Company's main line, in the city of Aurora, in Kane county, to, and into, the city of Chicago, by the way of Naperville, and to acquire depot and station grounds, and such other lands as may be required for the business of the Company in said city of Chicago, pursuant to authority granted by an act of the Legislature of the State of Illinois, approved February 28, 1854. And also, that they be and are hereby authorized to issue and dispose of the bonds, especially provided for, and expressly reserved, for the purchase of said lands, and the construction of said road and its appurtenances, in creating the Trust Mortgage, January 1, 1858, upon the property of the Company.

The meeting then proceeded to election of eleven Directors for the ensuing year; when the tellers received the ballots, and reported that—

John Van Nortwick, Chauncey S. Colton, James F. Joy, Erastus Corning, John M. Forbes, John W. Brooks, Henry P. Kidder,

Robert S. Watson, Sidney Bartlett, William Boott, and Edward L. Baker, had received the entire 38,613 votes, being all the votes cast. Whereupon they were declared unanimously elected Directors of the Company for the ensuing year.

The report of the Directors gives the following statement of the financial condition of the Company:

The expenditures made by this Company have been on account of constructing the 133 miles of road owned by the Company, including depots and grounds at Chicago and Burlington; Union track at Chicago, and equipment for its own and in part used on connecting roads, as follows:

For Construction.....	\$5,784,606 09
Depot and Grounds at Chicago.....	257,859 45
Depot and Grounds at East Burlington...	37,399 47
Union Track in Chicago.....	39,182 84
Equipment.....	1,430 12 79
Total.....	\$7,549,249 34

On account of contracts for constructing, and for interest in the Peoria and Oquawka Railroad, from Peoria to Burlington, 96 miles, as follows:

Payments and advances made pursuant to contract and lease of that part of road between Galesburg and Burlington.....	\$530,861 18
Payments on account of contract and lease of Moss, Harding & Co.....	1,164,365 23
Payments for 1st mortgage bonds and coupons past due.....	468,433 89
Payments for 2d mortgage bonds and coupons past due.....	229,611 60
	2,413,271 90

On account of agreement made with the Quincy and Chicago Railroad Company, and for the purchase of the bonds and other interests in that road, as follows:

For 3d mortgage bonds, received on settlement of old account....	\$7,000 00
For 2d mortgage bonds, purchased under contract of 1853.....	193,500 00
For 2d mortgage bond exchanged under contract of June, 1860....	696,000 00
For 1st mortgage bonds exchanged under same contract.....	92,000 00
Balance due for payments to trustees, on account of said road and appurtenances.....	106,968 63
	1,925,468 63

Total Construction Account, including payments and advances for account of the above connecting roads.....\$11,887,989 87

The Capital Stock of the Company, on the 30th day of April, was.....\$4,791,540 00

The funded debt at the same date, excluding the Bonds canceled by the Sinking Fund, was as follows:

Bonds which may be exchanged for Chicago, Burlington and Quincy eight per cent. Trust Mortgage Bonds.	
Chicago & Aurora 1st mortgage 7 per cent. payable July 1st, 1867....	\$230,000
Central Military Tract, 2d mortgage 8 per cent., payable May 1, 1868....	204,000
Central Military Tract, 1st mortgage 7 per cent., payable July 1, 1864....	248,000
Central Military Tract, plain 8 per cent., payable March 1, 1876.....	28,000
	\$710,000

C. B. & Q. Trust Mortgage Sinking Fund 8 per cent. bonds, payable Jan. 1st, 1863, exchanged for Chicago & Aurora, and Central Military Tract Bonds.....1,808,000

Amount issued and sold of same class of Bonds, at various times to date.....1,432,000

Total.....3,940,000

Less, amount bought and canceled by Sinking Fund.....	233,000	3,007,000 00
C., B. & Q. plain 7 per cent. bonds, payable Sept. 20, 1880, issued to C. T. Hillyer, Trustee for account of contract and lease of Moss, Harding & Co. of Peoria and Oquawka Railroad.....	700,000	
Amount of same class of bonds issued on account of purchase of Peoria & Oquawka 1st and 2d Mortgage Bonds.....	55,000	755,000 00
C., B. & Q. 2d mortgage bonds, 4 1/2 and 4 per cents. payable July 1, 1880, issued in exchange for 1st mortgage bonds of the Northern Cross, now Quincy and Chicago Railroad.....		922,000 00
C., B. & Q. Scrip Certificates, without interest, payable in thirty two equal semi-annual instalments, commencing Jan. 1, 1861, issued in exchange for 2d mortgage bonds of the Northern Cross, now Quincy & Chicago Railroad.....	696,000	
Less three instalments paid.....	65,250	630,750 00
Total Funded Debt.....		6,024,750 00
Total Stock and Funded Debt.....		\$10,816,290 00

The preceding statements show that the cost of the road and its appendages, with the advances and investments made for and on account of connecting roads, exceed the amount of Stock and Funded Debt of the Company, by the sum of.....\$1,071,699 87

The other assets and liabilities of this Company on the 30th day of April, 1862, were:

Amount of material on hand for the future use of the operating department.....	\$64,407 50
Steam Ferry Boats—Black Hawk and Fannie, value.....	25,526 09
Accounts, and Bills Receivable due from Post Office Department, and from Agents and Connecting Roads.....	128,213 43
Deposits in New York and Boston, and in Treasury.....	69,978 16
Total.....	\$388,125 18
Amount of unclaimed dividends.....	\$ 1,035 00
Unpaid accounts and pay rolls.....	34,379 10
Bills payable.....	3,850 00
Due agents and connecting roads.....	24,400 31
	63,664 41
Balance.....	\$224,460 77
Add previous Balance of Expenditures, made for construction and advances for connecting roads, over Stock and Funded Debt.....	1,071,699 87
Total.....	\$1,296,160 64
Less payments for Sinking Fund.....	285,408 63
Balance.....	\$1,010,652 01

The income for the past year, being the earnings on the Road owned by the Company, and their proportion (73 per cent.) of earnings on the thirty miles of Galena Road used by this Company, were:

For the Transportation of Freight.....	\$1,208 294 31
" " Passengers.....	291,284 05
" " Nails and Miscel's.....	51,649 02
Total.....	\$1,551,227 39

The expenditures chargeable to Income Account, were:

Operating Expenses.....	\$731,030 20
Rent of Depot.....	39,999 98
Transfer Office.....	600 10
Interest and Exchange.....	25,728 58
Discount and Loss on Illinois Bank Notes.....	8,448 44
Expenditures for Improvement Account.....	44,896 97
Interest on Bonds.....	273,986 25
Taxes.....	20,821 28
Total.....	\$1,145,441 70
Balance to credit of Income Account.....	405,785 69
Add balance as per report of last year, including payments for Sinking Fund.....	890,374 95
Total.....	\$1,296,160 44
There has been expended for 310 bonds, purchased and canceled for Sinking Fund.....	285,508 63
Net balance.....	\$1,010,652 01
The Capital Stock of the Company has been increased during the past year 1,022 shares, or.....	\$102,200 00

(Of the above 872 shares were issued in payment for Peoria & Oquawka Railroad Bonds, and 150 shares in payment for account of Quincy & Chicago Railroad, at par.)	
The Funded Debt has been increased by the sale of Consolidated Bonds.....	403,000 00
Plain Bonds for account of the Peoria and Oquawka Railroad.....	755,000 00
Bonds, 4 and 4 1/2 per cent. exchanged for Quincy & Chicago Bonds.....	109,000 00
Scrip issued for Quincy and Chicago Bonds.....	8,484 38
	\$1,275,484 38
Less Scrip redeemed.....	65,250 00
Balance.....	\$1,210,234 38
Total increase of Stock and Bonds.....	\$1,312,434 38

The payments made the past year on account of construction and equipment of road, and investments for and on account of connecting roads, have been:

For construction and equipment.....	\$80,323 42
For account of Peoria & Oquawka Road.....	1,434,156 77
For account of Quincy & Chicago Road.....	174,741 38
Total.....	\$1,693,221 57

The above payments exceed the amount of stock and bonds issued by the sum of \$380,787 19, which has been paid out of the income of the past year.

The expenditures charged to Construction, were payments made for additional depot grounds and buildings in Chicago.....	\$56,140 10
And for Equipments—new cars.....	24,183 32
Total.....	\$80,323 42

The expenditures for improvement account, paid out of the earnings, were of the same general character as those mentioned in former reports, and consisted of improvements in—

Re-building bridge over Fox River.....	\$ 6,722 22
Substituting stone and earth work for other bridges, culverts and cattle guards and embankments, filling up Bureau Valley bridges, Tracks, slip, and other work required on South Branch depot grounds.....	12,368 05
For new buildings.....	2,854 57
Tools and Machinery in shops.....	4,781 03
Total.....	\$44,826 97

The receipts from the business of the road, contrary to our expectations, show an increase the past over the previous year, of about 3 per cent., or \$42,360 79.

The increase upon the freight was about 7 per cent., while the decrease upon passenger earnings was about 13 per cent.

The expenses for operating the road show a satisfactory improvement over the previous year, having been 47 13 100 per cent. of earnings against 49 88-100, a gain of 2 75-100 per cent.

The road and equipment have been well and thoroughly maintained, and the business transacted at a cost that gives assurance of good and efficient management, on the part of the officers and men in the service of the company in these departments.

The company has, heretofore, rented depot and grounds in Chicago for the accommodation of its freight and passenger business, except for lumber and some other heavy freight, and the past year for grain, which has been transacted on its own premises. The large increase of railroad business in this city has rendered it impracticable longer to obtain these accommodations for freight from other companies.

Under these circumstances the company had

no other alternative but to purchase such additional grounds as were required to transact its freight business, which has been recently done. They adjoin those previously owned by this company on the south branch of the Chicago River, and extend westerly along North street, about two thousand feet, comprising the south half of blocks 48, 49 and 50. A substantial freight house is now being erected on these grounds, 700 feet in length, by 80 feet wide, constructed of stone and brick, with galvanized iron roof.

The tracks required are being laid, and when completed will equal about three miles.

A transfer house will also be requisite, for the transfer to and from other lines of road and from vessels.

The cost of these grounds, buildings, tracks and improvements, will be about \$150,000; of this \$56,140 10 has already been expended, and is embraced in the present report.

It appearing impracticable at this time to make satisfactory permanent arrangements for the accommodation of our passenger business in Chicago, an agreement has been made with the Illinois Central and Michigan Central Railroad Companies, for the accommodation of this business at their Union Depot for two years, from and after the 1st day of June, 1862.

The Peoria and Oquawka Railroad, from Burlington to Galesburg, 42 miles, has been operated the past year by this Company, under the contract and lease originally made with that Company, and that part between Galesburg and Peoria, fifty-four miles, under the contract and lease of Moss, Harding & Co. This road passes through a fine section of well improved country, and furnishes a large business that passes over the line from Galesburg to and from Chicago, contributing largely to the revenues of this company.

The Quincy and Chicago Railroad, extending from Quincy to Galesburg, one hundred miles, has been operated by the officers of this company in conjunction with the agent of the trustees, for the benefit of the bondholders of that road, now largely and substantially this company.

The report also gives a detailed account, for which we have not the space, of the origin of the difficulties between this company and the Peoria and Oquawka Railroad Co. It appears that in 1853 the P. & O. R. R. Co. sought and obtained aid from the companies forming the Chicago, Burlington and Quincy R. R. to complete their line from Galesburg to Burlington. In consideration of which the C., B. & Q. R. R. received all the unsold second Mortgage Bonds of the P. & O. R. R. and a lease of that road west of Galesburg for a term of three years with the condition that they should remain in possession of this portion of the road until the debt was fully paid. And after that the Central Military Tract R. R. Co. should still have the right to do its business over the road, paying the P. & O. R. R.

such prices for fare and freight as it should charge for the same classes of fare and freight upon other parts of its line of road. Thus the Peoria and Oquawka R. R. Co. secured the completion of its line from Galesburg west to Burlington, and the Chicago, Burlington and Quincy Line secured a connection with the Mississippi. Subsequently to this, other parties became interested in the P. & O. R. R. and extended it eastward to the Indiana State Line, and then became anxious to obtain sole control of the whole line from Peoria to Burlington. Hence the difficulty between the two companies and the contest for the possession of this portion of the line.

The Quincy and Toledo Railroad Company have continued to run their trains over the Quincy and Chicago Road, from Quincy to Camp Point, a distance of twenty two miles, under an alleged agreement with the Quincy and Chicago Company, which the trustees in possession do not acknowledge the validity of, but have repudiated.

The compensation paid by them for the use of this road, including depot accommodations and station service at Quincy, the past year, was only about \$10,000; a sum wholly inadequate for the use of the property and the services performed.

The trustees, in order to place the property and its management more effectually in the hands of its owners, have instituted proceedings for the foreclosure of the mortgages upon it. It is proper to say, this Company being the principal owners of the bonds, that in case they should become the purchasers at the sale, they would have no desire or expectation to exclude the trains of the Quincy and Toledo Company from passing to and from Quincy, but, on the contrary, would be prepared to make a just and fair arrangement with that Company, for the use of that part of the Road.

Conditional arrangements have been made by the directors, subject to approval by the stockholders at their annual meeting, by which this Company, if the arrangement meets with approval, will become the owner of thirty miles of railroad, extending from Yates City, a point on the Peoria and Oquawka Railroad about twenty miles east of Galesburg, to Lewiston the county seat of Fulton county. The proprietors of that piece of road had progressed far in its construction, had nearly graded and bridged it, had procured ties for the whole line and considerably more, had purchased and paid for and had in Illinois chairs, spikes and iron, for twenty-six miles of the road, but were unable to do more.

They were pressed by a suit by contractors for about \$10,000, and owed to another contractor about \$20,000, and it would take about \$60,000 in addition to complete the thirty miles of road, including the expenses of finishing the grading, and purchasing the additional quantity of chairs, and the laying of the track.

Under these circumstances they proposed to give to this Company the road bed and appurtenances, all their iron, chairs and spikes, and all the material and property belonging to the road, in absolute ownership, if it would undertake to finish and take the control of the road.

It runs into the center of the most prosperous and productive farming county in the State, across the best coal beds in the State, and would, when completed, contribute much to the through business of our line of road to Chicago, as well as to the Peoria & Oquawka Road towards Peoria, in which this Company has a large interest.

It was impossible for this Company to advance the requisite or any considerable sum of money, even to secure a practical extension of its road thirty miles into a very productive country, the business of which would be nearly all through business over its whole line, and would contribute to increase much its aggregate business. It was not deemed wise or prudent to allow the opportunity to pass by, however, if the money could be raised without any additional burden to the stockholders of this Company.

A conditional agreement was, therefore, made, by which the thirty miles of road and materials above stated were to be transferred to this Company in absolute ownership, the parties then in control creating bonds of the corporation in control of a portion of it, to the amount of \$125,000, for the redemption of which the thirty miles of road should stand pledged, and also, specifically, fifty per cent. of its gross earnings in the hands of this Company, and also fifty per cent. of the gross earnings of the business which may pass to and from that road over the roads owned by this Company, until said bonds shall be withdrawn.

It was estimated that fifty per cent. of the gross business furnished by that road, both upon that road and ours, would be enough to pay the expenses of transacting the business, and that the surplus or profits on the business will in four or five years pay these bonds, and that then this Company will become the owners of this extension, without any incumbrance practically, and without having been required to advance any money.

It will have been paid for, if the estimate be a fair one, out of the profits of a business which otherwise would not have existed for this Company.

This arrangement for the redemption of the bonds under the auspices of this Company enabled the parties to get for them money enough to complete the road, which is now running—having been completed about the first of June; the arrangement however is not final or binding upon this Company, unless the contract of the directors is approved at the annual meeting, by the stockholders.

The directors in such a case as this, securing an important road at about \$4,000 per

mile and thus paid for, could have no doubt as to the propriety of their action, and they recommend a resolution to be passed approving the agreement. The bonds of \$125,000 bear interest at the rate of eight per cent. It should be stated also that there had been created a trust mortgage, upon the line of which a portion of this thirty miles constitutes a part, but that none of the bonds were sold except five, which were given to the trustees, and that the remainder of the bonds, which were one million, are transferred, if the arrangement meets approval, to this Company. The road, therefore, in the possession of this Company, will be unincumbered, except for the \$125,000 and such an additional encumbrance upon twelve miles of it, as the value of \$5,000 upon that security bears to one million.

The necessity which has heretofore existed for using the revenue of the Company in protecting its interests, by the purchase of an interest in connecting roads, no longer exists, and the directors know no reason why the net revenue of the road should not hereafter be exclusively devoted to the payment of regular semi-annual dividends.

The following is the statement of the income and expenditures of the Chicago, Burlington and Quincy Railroad from Chicago to Galesburg—168 miles—exclusive of twenty-seven per cent. of the gross earnings of upon thirty miles between Chicago and the Junction, which was paid to the Galena and Chicago Union Railroad Company for the use of its track by the trains of this Company and for water for locomotives, amounting to \$99,913 09.

DEBIT.	
For Freight earnings for 12 months	\$1,208,294 91
Passengers " "	291,284 05
Miscellaneous " "	51,649 03
	\$1,551,227 99
CREDIT.	
By operating expenses	\$731,020 20
By rent of depot	30,909 98
By transfer office expenses	600 00
By interest, exchange and discount	25,728 53
By discount and loss on Ill. Bank notes in 1861	8 448 44
By interest on bonds	273,905 25
By taxes of 1861	20,821 28
By expenditures for improvements as follows—	
Fox River bridge	6,722 22
Stone Masonry and embankments, substituted for wooden bridges, culverts and cattle guards	18,201 00
South Branch Depot and grounds for dock, slip, tracks, lands, etc.	12,238 05
New buildings at Aurora and Galesburg	2,854 67
New machinery and tools, planer, drilling machine, nut and screw machine, shaping machine, punching and shearing machine	4,784 03
	1,145,441 70
Balance to credit of Income account for the year	\$405,785 69
Balance to credit of Income account as per report of May 1, 1861	\$90,374 95
	\$1,296,160 64

Of the foregoing balance the directors have expended \$66,393 47 for purchase of \$77,000 Chicago and Aurora Second Mortgage Sinking Fund Bonds, which, with the mortgage, have been canceled and filed in the office of the Company. Also, \$219,115 16 for the pur-

chase of \$233,000 Chicago, Burlington and Quincy Trust Mortgage eight per cent. Sinking Fund Bonds, which are canceled and deposited with the trustees, making the whole expenditure for sinking fund bonds \$285,508 68.

Many of the details of operation of this Company we are compelled by the length of the report to defer to another number.

NOTICE.

The following notice is issued by the Chairman of the Trustees of the Chicago, Alton and St. Louis Railroad:

CHICAGO, ALTON AND ST. LOUIS RAILROAD—*Late Chicago and Mississippi R. R.*—Holders of the First and Second Mortgage Bonds, and all the holders of the Receiver's certificates of indebtedness of the above-named railroad, are hereby required, pursuant to a resolution adopted at the Bondholder's meeting of 9th of July, 1862, to deposit their above named documents with L. H. MEYER, Chairman of the Trustees before the 10th day of September, 1862, at No. 25 William street, room No. 9.

Attention is called to the third resolution, adopted at the Bondholders' meeting of 23d of July, 1862, according to which, parties not complying are subject to be remitted to their rights in their distributive share of the proceeds of sale, and all other and further rights which they may have, by virtue of the agreement, to cease.

Those who have not yet subscribed to the agreement, and have not paid their share of advances to the Receiver, can, in accordance with the last resolution, adopted at Bondholder's meeting of 9th of July, 1862, now become parties to said agreement by subscribing and paying at the office of Messrs. M. K. JESSE & Co., No. 14 Exchange-place, before the 5th day of September, 1862.

L. H. MEYER, *Chairman of Trustees.*

—NORFOLK & PETERSBURG R. R.—The Norfolk and Petersburg Railroad from Norfolk to Suffolk, 22 miles, has been changed from 5 feet, which is the general Southern gauge, to 4 feet 8½ inches, which is the same as the Seaboard & Roanoke Railroad running from Portsmouth to Suffolk. The object of the change of gauge was primarily convenience to our own troops. But there is another very important end gained; the change of gauge prevents anything like a sudden rebel raid from Petersburg on Norfolk. The rolling stock in the hands of the rebels can not approach nearer than 22 miles of Norfolk. The change was completed early in August, and on the 7th an excursion party went up the road as far as Suffolk and examined the work. The road is now said to be in excellent order.

ADVANCE IN FARES.—The leading lines from this city to the east have determined to increase the fares on and after Sept. 1, to meet the tax imposed upon them by the recent Internal Tax Law of Congress. The increase will not be very great but enough to cover the direct tax with a small contingent of increased expenditures.

CATAWISSA RAILROAD.

The following is the report of J. Dutton Steele, Esq., Chief Engineer of the Philadelphia and Reading Railroad, to that Company on the bridges of the Catawissa R. R. Mr. Steele says:

The chief mechanical structures upon the road are as follows:

No. 1. Dark Run, Trestle,—	21 spans, 30 feet each.	75 feet high.	Length, 630 feet.
No. 2. Rington, Trestle,—	39 spans, 30 feet each.	125 feet high.	" 1170 "
No. 3. Stringer Hollow, Trestle,—	15 spans, 30 feet each.	90 feet high.	" 450 "
No. 4. Long Hollow, Trestle,—	25 spans, 30 feet each.	130 feet high.	" 750 "
No. 5. Mine Gap, Burr Bridge,—	6 spans, 110 feet each.	105 feet high.	" 600 "
No. 6. Fisher's Run, Burr Bridge,—	8 spans, 100 feet each.	125 feet high.	" 800 "
No. 7. Mainville Burr Bridge,—	8 spans, 100 feet each.	105 feet high.	" 800 "
No. 8. Susquehanna Bridge, at Rupert,—	9 spans, 155 ft. each.	About 30 ft. high.	" 1395 "
Total.....			6595 "

In addition to the above main bridges, there are some smaller structures which are in a safe condition, viz: The Catawissa bridge of about 100 feet span, near Catawissa; the Canal bridge at Rupert, of 60 feet span; a trestle work over the flats of the Susquehanna; and the Chilisquaqua bridge, 82 feet span, which latter I did not examine, but which is mentioned in the reports of the Company, as having been renewed within the past year, and may therefore be considered safe.

As regards the four main trestles, the renewal of No. 3 has just been finished, and a considerable amount of new timber has already been placed in Nos. 1, 2 and 4, and the process of renewal is progressing. I consider them at present quite safe, and if the system of repairs now in progress is continued, can see no reason why they should become otherwise. They are built of white pine timber; a material which will give timely warning of its approaching weakness from decay, and is not liable to sudden fracture.

Nos. 5, 6, and 7, are arched structures, supported on alternate stone and wooden piers. I observed no unguarded weak points about them, and consider them in a fair condition, and safe.

No. 8 is the Susquehanna bridge at Rupert, to which my attention was particularly called. It rests on substantial stone piers, but the time for renewing the wooden superstructure has arrived. A contract has been entered into by the Company for replacing it with a substantial arched Howe Truss, and I found the workmen already making their preparations. The old structure has been strengthened at its weakest points; and I observed nothing about it to indicate any immediate danger. Such danger, if it has ever existed, must, to a large extent, or entirely, be removed by the presence of the workmen, who will be engaged in its reconstruction, and will detect any new indication of weakness; and who, it is understood, will push forward their

trestle work, so as to give additional strength to the old structure.

In conclusion, I may remark, that the rather extensive repairs now in progress to the mechanical structures of the road have not been commenced before they were needed, but as soon as, in my humble judgment, the actual safety of the passenger traffic demanded that they should be; and with the continuance of that care on the part of the officers of the road, which I was glad to observe at all points of risk, no accident to passenger trains is likely to occur from sudden disaster to the bridges.

NEW IRON BRIDGE NEAR NEW YORK.

We find in the Scientific American a very full and interesting account of the modus operandi practiced in constructing the new iron bridge over the Harlem River near New York. As the mode of proceeding is both novel and simple and effectual we copy the article entire.

"A new and peculiar iron draw-bridge is now being constructed over the Harlem river, on the line of the third avenue, in this city. One day last week we paid it a visit, examined the works under progress and the drawings of the engineers, and, judging from these, we believe it will be the greatest structure of the kind on our continent, and perhaps in the world. The necessity of building a durable bridge in place of a perishable wooden one, over this part of the river, where the traffic between this city and the country is so great—amounting, as we have been told, to 3,000 vehicles and 5,000 foot passengers daily—had long been felt. It was intended at first to erect a complete stone structure, but the great depth of the tidal river, 25 feet at this point, and its very unequal bottom, containing quicksands and large boulders, offered serious difficulties to the forming of cofferdams, and laying piers of masonry in the usual way. The original design was, therefore, changed to the present one, consisting in principle of constructing massive solid abutments of masonry at each shore, and three piers in the river, formed of great cast-iron hollow columns, built up inside with masonry, all supporting three large spans, composed of iron box girders. The total length of the bridge will be 472 feet, divided into three spans, the two side ones fixed, the central one forming a rotary draw, 218 feet in length, to permit steamboats and other vessels to pass on each side with a clear waterway of 80 feet. In extreme breadth over all the bridge will be 52 feet; there will be a foot-path at each side seven feet wide, and a broad central road-way for vehicles. On the New York side the abutment is finished. It is a work of substantial masonry, faced with granite blocks. At the left side a flight of broad granite steps leads to the river, and a similar

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	R to of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	64	48	\$	\$	\$	\$	\$	Sept. 30, 1860	Maryland Sterling.	3,000,000	5			
Baltimore and Ohio.....	Md.		380	13,111,800	10,781,833	566,07	3,922,203	2,205,728		Mortgage.....	2,400,000	6	95	1885	
do do										"	700,000	6	84	1880	
do do										"	1,125,500	6	90	1875	
do Washington Branch.....	Md.		30	1,650,000						"	1,000,000	6		1887	
Bellefontaine and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	139,129	314,000	8,795	Dec. 1860.	1st Mortgage.....	791,000	7	55	1866	
do do										2d "	160,000			1870	
Buffalo and State Line.....	N.Y. & Pa.	122	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860.						
do do															
Burlington and Missouri.....	Mo.	132	75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	96	96	3, 98,400	8,800,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	450,000	6	100	1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,438	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	800,000	7	62	1861	
do do										1st "	80,000			1863	
do do										2d "	950,000			1875	
do do										3d " S. F.	1,365,800			1876	
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d "	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.		222	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,400,000				
do do										2d "	1,535,000				
Chicago and Milwaukee.....	Wis.			No report received.						3d "	1,000,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		194	2,897,750	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	2d "	200,000				
do do										Pref 1st Mor. & S.F.	1,250,000	7	80	Feb. & Aug.	
do do										Gen'l 1st Mortgage.	3,500,000	7	52	Feb. & Aug.	
Chicago and Rock Island.....	Ills.	67	175	5,603,000	1,397,000		1,164,012	455,963	June 30, 1861	2d "	2,000,000	6	26	May 1.	
Chicago, Burlington and Quincy.....	"	86	138	4,689,340	4,814,515		1,514,428	761,630		1st Mortgage.....	2,000,000	7	105	1870	
do do										Cons. 1st Mort. S. F.	2,172,000	6	110	1863	
do do										" 2d " S. F.	813,000	6	108	1890	
do do										1st Mor. Chi. & Aur.	390,000			1867	
do do										2d "	303,000			1869	
do do										1st "Cent. Mil. Tract	390,000			1864	
do do										2d "	245,000			1868	
Chicago, Iowa and Nebraska.....	Ind.		82	No report											
Cincinnati and Chicago Air Line.....	Ohio.	99	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	950,000	7	100	1880	
Cincinnati, Hamilton and Dayton.....	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
Cleveland and Mahoning.....	Ohio.	68		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,500				
do do										1st Mortgage.....	850,000		80		
do do										2d "	400,000				
do do										3d "	344,000				
Cleveland and Pittsburgh.....	Ohio & Pa.	23	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000			1860	
do do										2d " M. L. or 1st Ex.	1,188,000			91	1873
do do										3d 2d Ex.....	1,165,000			80	1865
do do										4th 3d Ex.....	1,154,000			64	
Cleveland and Toledo.....	Ohio.	50	148	3,343,800	3,850,670	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	350,000			94	1867
do do										1st " " 2d Div.	263,000				1872
do do										2d " " "	265,000				1862
do do										1st " Tol. Nor & Cleve	521,000				1863
do do										2d " " "	293,300				1864
do do										Junction Income..	44,500				1862
do do										C. & T. Income....	300,000				1864
Cleveland, Columbus and Cincinnati.	Ohio.	123	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000			99	1864 & 1890
Cleveland, Painesville and Ashtabula..	"	125	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000				1861
do do										2d "	363,000				1862
Columbus and Xenia.....	Ohio.	105	54	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700			92	1860 to 1866
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	912,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666						2d "	2,212,000				
do do										1st Mortgage.....	300,000			50	
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	2,500,000				1875
Detroit and Milwaukee.....	Mich.	186		No report						2d "	1,000,000				1866
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,604	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		966,061	1,219,100	249,668	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d "	18,000				
Galena and Chicago Union.....	Ills.	72	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,963,000		104	1862 & 1863	
do do										2d "	1,200,000		100	May 1, 1875	
Great Western.....	Ills.		175	1,600,000	2,391,000		45,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000				
Green Bay, Milwaukee and Chicago..	Wis.	84		400,000	No report										
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573		Land Mortgage...	5,000,000		26		
Hannibal and St. Joseph.....	Mo.	206		1,041,066	10,554,000	220,306	996,907	512,933	Sept. 1, 1860.	Mortgage Conv....	1,354,000		45		
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	927,000	6	30	1873	
Hudson River.....	N. Y.	47	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	99	1869 & 1870	
do do										2d S. F.	2,000,000			180	
do do										3d " "	1,840,000			104	1875
Illinois Central.....	Ills.	62	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000				1868
do do										Construction.....	12,885,000			64	1875
do do										"	4,115,000			97	1875
do do										Debtures.....	42,740			96	
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000				
do do										2d "	578,000				
do do										Income.....	500,000				
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	400,000			85	1866
do do										2d "	200,000				
Indianapolis, Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort..	649,984				
do do										2d "	314,000				
Iowa Central Air Line.....	Iowa.		13	245,000	755,000		No report								
Iron.....	Ohio.			118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.		86½	\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st	299,000	75		1861
do										2d	392,000	70		1873
Kentucky Central (Covington and Lexington).....	Ky.		99	Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st ".....	250,000	7		
do										2d " Conv.	1,000,000	7		
do										3d ".....	600,000	7		
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiver.						1st Mortgage E. D.	90,000	89		
do										2d " E. D.	1,000,000			
do										1st Land Grant W D ..	4,000,000		21	
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report		June 30, 1861	1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.		29	514,433	130,000		109,944	43,267	Jan. 1, 1862	1st Mortgage.....	1,300,000	6		1883
Little Miami.....	Ohio.	100	65				1,530,050	529,981	June 30, 1861	City Loan.....	174,000			
Louisville and Frankfort.....	Ky.		65	1,169,59	384,519		245,910	98,679		1st Mortgage.....	248,000			
Louisville and Nashville.....	Ky.		208	5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st Mortgage.....	2,600,000	7		
do										1st " Lebanon Br.	400,000			
Louisville, New Albany and Chicago..	Ind.		288	2,500,000	3,000,000	200,000	645,827	371,402		1st " Memphis Br.	500,000			
do														
Madison and Indianapolis.....	Ind.		87	1,648,050	1,285,300	87,969	230,563	99,000	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861
Marietta and Cincinnati.....	Ohio.		208	8,561,213	190,408	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv ..	2,500,000	7		1868
do										2d ".....	2,000,000	7		
do										3d ".....	1,500,000	7		
do										Sterling Income.....	333,000	4		
Michigan Central.....	Mich.		66	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	Domestic.....	928,617			
do										1st Mortgage.....	467,483	6	92½	1872
do										1st " Conv.	500,000	8	84	1869
do										1st " unconv.	250,000	8	96	1860
do										1st " Dollar Conv.	2,500,000	8	106	1869
do										1st " S. F. Conv.	4,135,000	8	108	1882
Michigan South'n & North'n Indiana	Mich &		27½	9,018,200	9,714,704	437,886	2,075,450	1,039,829	Mar. 31, 1861.	Mort. Mich. S.	991,000	99		1860
do										" Nor. Ind.	985,000	103		1861
do										" Goshen Line.....	1,168,140	100		1868
do										S. F. Toledo.....	2,750,000	101		1885
do										2d Mortgage.....	2,465,000	86		1877
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d ".....	200,000	7		
Milwaukee and Horicon.....	Wis.		42	1,101,200						1st Mortgage.....	420,000	8		
do										2d ".....	600,000	8		
Milwaukee and Prairie du Chien.....	Wis.	32½	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7		1891
Milwaukee and Western.....	Wis.		71	No report										
Mississippi and Missouri.....	Iowa,		35	No report						1st Mortgage Conv.	1,000,000	7	96	
do										2d " S. F.	400,000	8		
New Jersey.....	N. J.		34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Oskaloosa Div.	1,425,000	7		
New Jersey Central.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860	Land Grant.....	7,000,000	102½		
New York and Erie Pref.....	N. Y.	67½		Sold under mortgage			5,590,916	1,979,400	Sept. 30, 1860	Mortgage.....	711,000			
do		37½								1st Mortgage.....	3,000,000		108	
do										2d ".....	4,000,000		108	
do										3d ".....	6,000,000		104½	
do										4th ".....	4,900,000		93½	
do										5th ".....	1,792,500		82½	
New York and Harlem Pref.....	Conn.	30	138	5,717,190	6,035,752	.....	1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	105½	1873
do										2d ".....	1,000,000	7	101	1864
New York and New Haven.....	Conn.	16		3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7	94	Dec. 1, 1866
do														Oct. 1, 1875
New York Central.....	N. Y.	93½	356	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,925,000	6	101	May 1, 1883
do										Mortgage.....	3,000,000	7	103	June 15, 1864
Northern Central.....	Md.		138	2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860	Construction.....	2,000,500	6		1885
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,000	96,731	Nov. 1, 1860.	State Loan.....	4,500,000	6		
Ohio and Mississippi, Eastern Div....	Ohio & Ind		192	Leased	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500			
do										3d ".....	316,995			
do										Construction.....	4,637,920			
do										Income.....	3,591,185			
Ohio and Mississippi, Western Div....	Ills.		148	.....	3,292,403		No report			State Loan.....	7,000,000			
Pacific.....	Mo.			3,199,662	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	" S. W.	2,800,000	6		
do										Construction.....	4,500,000	6		
Pennsylvania.....	Pa.		359	13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,900,000	6	104½	1888
do										2d ".....	2,319,000	6	98½	1875
do										2d " Sterling.....	1,957,440	6		1875
do										State Works.....	7,200,000	5	89	
Peru and Indianapolis.....	Ind.		74	1,100,000	820,000	80,000	No report							
Philadelphia, Wil. and Baltimore.....	Del.		98	5,600,000	2,310,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6	99½	1884
do										Improvement.....	119,000	6		1863
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	1st Mort. O. & P.	1,000,000	7	94½	1865
do										2d ".....	750,000	7	79	1866
do										1st " O. & I.	1,000,000	7		1872
do										2d ".....	250,000	7		1873
Pittsburgh and Connellsville.....	Pa.		49	1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000	7		
Racine and Mississippi.....	Wis.		104	2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.					
do														
Sandusky, Dayton and Cincinnati..	Ohio.		170	2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856
do										".....	997,000	7		1866
do										".....	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.		125	848,770	1,385,200	132,063	185,974	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886
do														
Springfield, Mt. Vernon & Pittsburgh.	Ohio.		56	400,975	500,000	100,000	110,200	53,100		1st Mortgage.....	500,000			
do			50	1,000,000	1,050,000	200,000				2d ".....	450,000			
do										1st Mortgage.....	1,000,000	7		1870
do										2d ".....	500,000	7		1865
do										1st Mortgage Conv.	1,000,000	7	110	1862
do										2d " Conv.	2,000,000	7	83	1868 & 1870
do										1st " Bel. & Ill.	517,000	7		1873
do										1st Mortgage.....	290,000	7	92	1866
do										1st Mortgage.....	3,400,000	7	29	Aug. 1, 1865
do										2d ".....	2,500,000	7	69	Nov. 1, 1878
do										Mort. Coupons.....	98,049	7		1860 to 1865
Terre Haute, Alton and St. Lous....	Ills.		208	No report										
do														
do														
Terre Haute and Richmond.....	Ind.	100	73	1,381,450	23									

flight is to be laid on the right side. This will make the water front at this bridge similar to the quays on the rivers in Europe, where stone steps lead to the water for the purpose of entering small boats. Operations have not been commenced on the north shore of the river, owing to some unsettled difficulty about the land. The piers in the river are in a very forward state. The central one, for the turn table of the draw, consists of eleven cast iron columns, each six feet in diameter, sunk and arranged in a circle of fifty feet in diameter. In the center of these is a single column forming the axis of the whole. The other two piers are each composed of a single row of five columns, the three inside ones being six feet in diameter, and the outside eight feet in diameter each.

"Only one column of all these piers now remains to be sunk. The sinking and construction of the pier columns involve interesting engineering operations. A description of one will suffice for the whole. Each column is formed of sections of cast iron varying from nine to nine and a half feet in length, and two inches in thickness, and cast with an inside flange for bolting them together like pipes. In commencing to sink one of these, three sections are first bolted together, forming a column about 27 feet high. It is set perpendicularly upon a strong wooden frame in the water, and when placed over where it has to be sunk, the frame is removed with a derrick, and the column lowered upon the river bed. The other sections are afterward bolted on. It now requires to be sunk to a considerable depth below the bed of the river to obtain a secure foundation. Some columns require to be sunk deeper than others. One has been sunk no less than 35 feet seven inches below the surface of the bottom.

"In order to effect this object, the column is converted into a diving bell, into which the operatives descend, and excavate inside, the column sinking as the work progresses, until the proper depth is reached. This depends on the nature of the bottom of the river. The height from bottom to top ranges from 50 to 70 feet. In order to sink a column a large cylindrical air-tight chamber, called an 'air-lock', is fastened on its top. This is provided with a door on its bottom and another on its top; and also with valves packed with india-rubber. It is charged with air by a steam-engine situated on a scaffold, which operates several air-pumps and forces air into the lock through a flexible tube. As the air pressure increases, the water which entered the column in sinking is forced out underneath, until the bed of the river is exposed. By the peculiar arrangement of the valves and doors of the air-lock, the pressure of air is maintained by the engine, in the column, while the men descend and excavate below, and send up the dirt through the interior until the column has been sunk to the required

depth. When this is accomplished the column is filled up inside with masonry, so that when finished it is a compound of cast-iron and solid masonry. The sinking of these hollow shafts has been a work of great labor and difficulty, as boulders, weighing from one to thirty tons, have to be removed to permit their descent.

"On the center pier a great circular girder, forming a ring—cap 46½ feet in diameter, 3 feet broad, and 3 feet 9 inches deep—has been laid. It is to form the roadway of the draw turn-table. The girder has been cast in eleven sections, and its top is now being planed into position by a planer erected for the purpose and which is the largest we have ever seen. It resembles a revolving crane, with the center shaft in the middle columns of the pier. The cutter travels round the girder, planing as it moves. It is driven by belting from the steam-engine, and the cutter is made to traverse round by a pinion biting into a rack secured inside the girder. The cutter of this planer traverses a circle of nearly 147 feet, making a revolution every six minutes. A track of smooth, wrought iron blocks will be laid upon the face of this girder, and on this the old rollers of the turntable of the draw will be supported and travel.

"There will be 98 hollow rollers on the turn-table, each two feet in diameter, and the draw will be composed of a peculiar triplet arched girder, with its axis in the central columns of the circular pier. In position it will rest on three piers; when open it will be supported and moved on one. To allow vessels to pass, the mass of the draw to be moved will weigh about 400 tons. Each girder for the spans will be constructed of half-inch plate iron, strengthened with angle iron. It will be a riveted arched box 3½ feet deep, 3 feet broad and set in cast iron shoes, and sustained by a wrought iron tension rod, no less than 8½ in. in diameter. Each span will have two girders, and the flooring will be laid on rolled needle beams or floor girders one foot deep.

"When the spans are erected, ornamental balustrades of cast iron will be put up, and the whole structure, when finished according to the design, will be beautiful as well as substantial. Every precaution appears to be taken to obtain a superior as well as desirable bridge, by the employment of well known, first class men, who have charge of the different departments, and by the use of the very best materials. The Chief Engineer is Mr. Erastus W. Smith; assistants, Ethan Rogers and Theophilus Sickles. The Superintendent, who has had charge from the beginning of the enterprise, is Mr. James Hough; Mr. Charles V. Hough has charge of the difficult work of sinking the piers and completing their masonry. Mr. John Roach of this city is contractor.

"When completed this will be the first bridge in the Northern States erected on cast-iron columns."

MONETARY AND COMMERCIAL.

The week that has just past has been marked by no striking events in the monetary world. The nerves of capitalists seem to have become stronger with constant exposure to war's alarms, and less heed is paid to rumors of reverses or even to serious mistakes than was formerly paid to small skirmishes.

The news from rebel sources of the capture of Baton Rouge, a year ago would have set the country in a blaze and disarranged the whole monetary world. But yet this week it seems to have no perceptible impression. The same may be said of the contradiction of the rebel story and the news of the rebel ram Arkansas. It has neither elevated nor depressed the market and matters go on in the monetary world as though we were in the midst of peace and prosperity. Money is abundant, and capitalists are glad to find safe investments by which they can realize moderate returns. There is little or no speculative feeling and legitimate business requires but little capital beyond its own. We quote No. 1 paper as easily negotiable at 8 to 10 per cent. and in some instances as low as 6 per cent. Call loans are quoted at 5 per cent.

The New York Tribune of August 16 says of the market in that city:

"In money there is no change excepting increased ease. On demand the rates are 3@5 per cent. mostly in 5 per cent. strictly prime paper is 5@6 per cent.

"The stock market, in one of its changeable moods, is stupid and quite dull, except in Government securities, which were much better with considerable spirited bidding. Considering the extreme animation of the past ten days, and the realizing consequent on high prices, stocks show great steadiness. Another cause for this halt for a breathing spell is the complete dependency of operatives for military news, and McClellan's "change of base of operations" implies a quiescent state of speculative affairs until his movements are satisfactorily ascertained."

The remarkable rapidity with which volunteers are pouring in to fill up the calls for the two 300,000 men gives a stability to confidence which was not felt a month ago. The first call is filled in most of the States and recruiting for the second call is progressing so rapidly that it is questionable whether it will necessary to resort to a draft in many of the States. This shows that the heart of the Northern people is in sustaining their government as a sacred duty. The question is not whether slaves shall be freed or kept in servitude; it is shall a discontented minority be accorded the right to forcibly destroy the government whenever they are voted down at a fair election or shall the supremacy of legitimate government be sustained and the minority be made to submit to the will of the majority, trusting to fair representations and the

justness of their cause to remedy the evils at the ballot box.

Exchange has been quiet and steady during the week. We have no change to make in quotations, simply noting that some houses charge their regular customers only $\frac{1}{2}$ dis. instead of the regular rate $\frac{1}{4}$ —while all charged strangers the full rates. We quote rates as follows:

	BUYING.	SELLING.
New York.....	$\frac{1}{2}$ dis.	par.
Boston.....	$\frac{1}{2}$ dis.	par.
Philadelphia.....	$\frac{1}{2}$ dis.	par.
Baltimore.....	$\frac{1}{2}$ dis.	par.
Gold.....	14 prem.	16 prem.
Silver.....	8 prem.	10 prem.
Demand Note.....	6 $\frac{1}{2}$ prem.	.....

The following are the quotations of money by the leading bankers in this city.

BANKABLE FUNDS.	
State Bank of Ohio.....	Kentucky.
Free banks in good credit.....	Treasury Notes.
State Bank of Indiana.....	.....
UNCURRENT FUNDS.	
New York City.....	$\frac{1}{2}$ dis.
Philadelphia.....	$\frac{1}{2}$ dis.
New York State.....	$\frac{1}{2}$ dis.
New England.....	$\frac{1}{2}$ dis.
MISSOURI—	
Farmer's Bank.....	5
Union Bank.....	10
All others.....	1
Iowa.....	1
Eastern Virginia.....	40@50
Wheeling, Virginia.....	1 $\frac{1}{2}$
Branches.....	2@3
Except Jeffersonville.....	2 $\frac{1}{2}$
Louisiana.....	25
PENNSYLVANIA—	
Pittsburgh.....	$\frac{1}{2}$
Interior.....	1@2
MARYLAND—	
Baltimore.....	1
Interior.....	2
Hagerstown.....	3
Michigan.....	1
Canada, solvent.....	5 prem.
Union and Planters' Bank of Tennessee.....	25 dis.
Bank of Tennessee.....	30
Tennessee stocks, solvent.....	40
" unsecured.....	40@50
North and South Carolina.....	45
Georgia.....	45
Alabama.....	45
Indiana free banks, solvent.....	$\frac{1}{2}$
" discredited.....	5@10
Illinois banks.....	3@10
Wisconsin banks.....	3@50

Sterling exchange in New York is quoted at 128 to 128 $\frac{1}{2}$ although it has been as low as 125.

The crops in Europe have proved a failure. All over the continent they will be below an average. Of the crops in England the New York Economist says:

FAILURE OF THE ENGLISH CORN CROP.—The London Economist, the most accurate authority of its class in England, has the following paragraph in its issue of July 26th: "The fair prospect of a fine and abundant harvest, which, in the early part of the season, cheered the hearts of farmers, has now finally passed away." The importation of corn into Great Britain, therefore, will be fully equal to that in 1861, which, (according to a parliamentary return just issued on motion of Mr. Caird, the most scientific and successful of British agriculturists) was 15,760,551 imperial quarters. We may therefore confidently look to large orders for the purchase of our cereals, and a reflux of gold during the present year. The quotations on the 26th ult., in London, for American and Canadian fancy brands, were 29s. to 31s. for 196 pounds.

This for our country is a most opportune circumstance. Our importations are already much less than usual: but even for these we cannot well afford to be compelled to pay in specie, as the drain would be too great. But if we can use our surplus breadstuffs to create an exchange, we shall benefit the producer of the North and save our coin.

Commercial affairs have been quiet. The low stage of water in the river prevents shipments by water, and the immense amount of freight now seeking the railroads makes almost a blockade of these avenues. It is a little early for fall purchases: but it is quite probable that a larger number of country merchants would be here buying, were it not for the orders of the Secretary of War respecting absentees from home at the time of the draft.

Provisions generally are firm. Flour is in light supply with a good demand. Superfine commands \$4 to \$4 10, extra \$4 15 to \$4 25, family, \$4 25 to \$4 50. Wheat is in good supply, the receipts having been large. Owing to the blockade of the railroads it is dull and has declined 2c. to 3c. per bushel. Quotations are as follows: Fair to prime red 75 to 80c, Ohio and Indiana white 80c. to 85c, Kentucky white 90c. to 95c. Corn is steady at 33c. Oats are in good demand with light receipts at 44c. Rye is dull at 50c. to 51c. Barley is also dull at 70c. to 75c. Hay is dull at \$11 to \$12 per ton.

Groceries are in fair demand. Raw sugar is quoted at 9 $\frac{1}{2}$ c. to 10 $\frac{1}{2}$ c., refined 11c. to 13 $\frac{1}{2}$ c. Prime New Orleans molasses 50c. to 52c. Coffee 22c. to 23 $\frac{1}{2}$ c.

Whisky is quoted firm at 26 $\frac{1}{2}$ to 26 $\frac{3}{4}$ c. Beef cattle declined to \$2 75.

—The earnings of the Chicago, Burlington and Quincy Road for July were:

1862.....	\$220,210 76
1861.....	163,465 07
Increase.....	\$56,745 69

—The Milwaukee and Prairie du Chien Railroad Company earned in July:

1862.....	\$108,721 51
1861.....	107,116 61
Increase.....	\$1,604 90

—The earnings of the Buffalo, New York and Erie Railroad for July were:

1862.....	\$58,180 55
1861.....	46,413 75
Increase.....	\$11,766 81

—The earnings of the Toledo and Wabash Road in July were:

	1861.	1862.
Passengers.....	\$13,732 05	\$19,384 95
Freight.....	77,732 21	95,949 08
Total.....	\$91,464 26	\$115,304 03
Increase.....		\$23,769 77

On Saturday last 337 cars arrived in Toledo.

—The Cleveland and Toledo Road earned in—

July, 1862.....	\$69,938
July, 1861.....	56,134
Increase.....	\$13,804

The last week of July gave an increase of

nearly \$5,000. These are the largest July earnings since the road was opened.

—The St. Louis, Alton and Chicago Railroad earned in July:

1862.....	\$73,700
1861.....	37,404
Increase (nearly 100 per cent).....	\$36,296

Annexed are the details of the earnings of the Galena and Chicago Union Railroad for the first week in August,

	1861.	1862.
Freight.....	\$18,099	\$13,875
Passengers.....	5,933	8,702
Mails, &c.....	1,100	1,250
Total.....	\$25,132	\$23,827

The earnings of the Chicago and Rock Island Railroad for the first week in August were:

1862.....	\$24,024
1861.....	19,824
Increase.....	\$4,200

The earnings of the Toledo and Wabash Railroad for the first week in August were:

	1861.	1862.
Passengers.....	\$3,658	\$4,366
Freight.....	18,138	31,688
Total.....	\$21,791	\$36,055
Increase.....		\$14,263

The earnings of the Chicago, Burlington and Quincy Railroad for the first week in August were:

1862.....	\$55,436 18
1861.....	31,464 54
Increase in 1862.....	\$23,971 63

The earnings of the Erie Railroad for the month of July were:

1862.....	\$597,009 97
1861.....	372,705 59
Increase.....	\$224,304 38

The amount of coal transported over the Delaware, Lackawanna, and Western Railroad for the week ending August 9 was:

	Week.	Year.
	Tons. cwt.	Tons. cwt.
Shipped North.....	8,419 16	188,550 10
Shipped South.....	20,116 10	455,481 18
Total.....	28,606 06	644,032 08

For corresponding time last year:

	Week.	Year.
	Tons. cwt.	Tons. cwt.
Shipped North.....	4,920 13	133,484 02
Shipped South.....	21,007 00	524,491 12
Total.....	\$25,927 18	\$676,978 14
Decrease.....		\$ 32,946 06

The earnings of the Norwich and Worcester Railroad for July were:

	1861.	1862.
Passengers.....	\$9,574 55	\$12,853 77
Freight.....	16,287 73	19,641 77
Total.....	\$25,866 08	\$32,495 58
Increase.....		\$6,829 46

The earnings of the Great Western Railroad of Canada for the week ending Aug. 8, were:

Passengers.....	\$22,559 60
Freight and Live stock.....	21,542 87
Mails and sundries.....	1,297 17
Total.....	\$45,099 74
Corresponding week, 1861.....	34,330 91

Increase in 1862..... \$10,768 83

The earnings of the Rome, Watertown and Ogdensburg Railroad for July were:

	1861.	1862.
Passengers.....	\$14,607 22	\$15,146 28
Freight.....	12,627 26	19,241 75
Other sources.....	3,018 00	1,627 81
Total.....	\$30,277 57	\$36,055 85
Increase.....		\$5,778 27

SANDUSKY, DAYTON & CINCINNATI RAILROAD.

The fiscal year of this company closes June 30th. The following is the statement of earnings and expenses for the past year:

Passengers.....	\$111,938 42
Freight.....	278,259 43
Mail.....	16 00 00
Express.....	9,344 8
Storage and car mileage.....	14,508 00
Joint earnings from Cleveland, Col. & Cin....	8,022 33

Total..... \$438,152 96

The expenses were:

Maintenance of way—Renewals....	\$18,900 49
Ordinary.....	68,348 62
Locomotive power—Renewals.....	95,365 62
Ordinary.....	53,542 20
Machine shop.....	12,257 21
Train expenses.....	45,972 77
Station expenses.....	45,168 97
Office and general expenses.....	38,157 23
Taxes, loss, and damage.....	12,597 84

Balance..... \$107,933 11

The net of last year was \$58,588 90, from a total of \$450,245 36. The statement of the year just closed given above, exhibits a decrease of \$12,992 40, in the gross earnings, and an increase in the net of \$48,444 21.

The over due bonds of 1856, amounting, as stated in last annual report, to \$125,000, have been reduced to 44,459, leaving outstanding a balance of \$80,550.

ILLINOIS CENTRAL RAILROAD.

The business of the Illinois Central Railroad for July, 1862, was:

LAND DEPARTMENT.

Acres Construction Lands sold.....	4,196.19 for	\$46,479 90
Acres Interest Fund Lands sold.....	9 3 61 for	11,248 64
Acres Free Lands sold.....	2,351.26 for	26,109 86

Total sales during July, 1862.....	7,546.06 for	\$83,838 40
To which add Town Lot sales.....		1,088 40
Total of all.....		\$84,926 80

Acres sold since Jan. 1, 1862.....	51,969.60 for	\$600,604 24
Sold previously (net sales).....	1,260,273.46 for	16,147,983 91

Total.....	1,312,243.46	\$16,748,583 15
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Construction bonds canceled previous to

June 20.....	\$2,121,500 00
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Cash collected in July.....	3482 63
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53,000 bush. corn received in July, on hand.	
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Net collections to June 30, 1862.....	4,244,607 85
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TRAFFIC DEPARTMENT.

Receipts from Passengers.....	\$82,293 45
Receipts from Freight.....	153,136 50
Receipts from Mails.....	6,338 34
Receipts from Rent of Road.....	5,333 33
Receipts from other sources.....	2,968 23

Total receipts in month of July, 1862.....	\$249,929 85
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Total receipts in month of July, 1861.....	189,279 75
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Increase.....	\$60,650 10
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Original Land Grant, 2,595,000 acres—

Railway, 706 miles of main track, and 97

miles of sidings—113 engines, 2,456 cars—

Funded Debt, \$15,234,500.

PITTSBURGH, FT. WAYNE & CHICAGO RAILROAD.

The following is the approximate statement of earnings of this road for the month of July.

	1862.	1861.	Increase.
From Freights.....	\$154,830 53	\$104,216 85	\$30,613 68
Passengers.....	72,366 34	58,009 65	14,356 69
Express.....	2,700 00	2,700 00	
Mails.....	7,825 00	7,825 00	
Rent of Railway..	7,083 33	7,083 33	
Rents.....	203 75	170 50	33 25
Miscellaneous.....	445 24	424 05	21 09
Total.....	\$245,673 09	\$190,429 38	\$65,243 71

Earnings from			
Jan 1 to June 30.	\$1,684,350 68	\$1,376,421 48	\$307,929 20

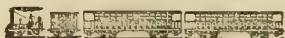
Total to July 31...\$1,930,023 77	\$1,546,850 86	\$373,162 91
-----------------------------------	----------------	--------------

Increase for July, 36 1-10 per cent; average increase to July 31, 24 per cent.

A RAILROAD BATTERY.—It is stated that in the late battles before Richmond the Confederates used a formidable railroad battery, consisting of an immense iron clad car mounting one large rifle gun and resting on seven sets of wheels. The whole propelled by a locomotive. It required but sixteen persons in all to manage it, and if we may rely upon the account of its performance given in the Richmond papers, it performed wonders in the battle. The following from the Richmond Enquirer, of July 26, shows the Confederate appreciation of its performances:

How important a part was played by the railway battery may be conjectured from the statement of a prisoner who was captured on the occasion. He informed Lieut. Barry that the second shell thrown into the ranks drawn up in the field just in front of Savage's house, killed and wounded one hundred men and thirty horses. It is believed, also, to have done great execution in the woods, and contributed, by the terror inspired by its immense missiles, to the easy rout of the entire division of the enemy.

Since that battle the enemy have left the track of the railroad, and the battery has seen no service. It has performed all it has undertaken, and must, therefore, be pronounced a complete success.

Cincinnati and Chicago Air-Line**RAILROAD.**

Opened for Business May 13, 1861.

Through Distance 280 Miles;

42 Miles Shorter than any other Route.

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C., H. and D. Depot, at 7:30 A. M. 7:00 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without rebilling or transhipment.

JOHN BRANT, Jr., Superintendent

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent.

33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON,
STOCK BROKER,
No. 21 West Third Street,
CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and takes collections.

KNOX & SHAIN,
Engineering and Telegraphic
INSTRUMENT MAKERS,
218 WALNUT ST., PHILADELPHIA.
(Two Premiums by Franklin Institute.)

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet Walnut & Vine
CINCINNATI O

J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,

m721

CINCINNATI

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE

**RAILROAD.**

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS.**CHANGE OF TIME.**

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:00 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:00 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—6:30 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars. Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.

W. H. L. NOBLE,

General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

BUSH & LOBDELL.

Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

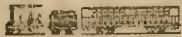
WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on

Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$1.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Belair, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

**NEW YORK, BOSTON,
AND ALL EASTERN CITIES,**

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DENLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6.

CHARLES MINOT, Gen'l Sup't

J. W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material. Orders respectfully solicited, with the assurance that pains will be spared to give entire satisfaction to all.

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM

PITTSBURGH TO PHILADELPHIA

(with close connections from Western Cities.)

ALL CONNECTING DIRECT TO NEW YORK,

THROUGH PHILADELPHIA,

AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (430 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM

PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.

BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburgh.

CLARKE & CO., Transfer Agents, Pittsburgh.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

W. W. AIKMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.

CLARKE & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

G. B. NEAL, Parkersburg, Virginia.

HALL & CO., Marietta, Ohio.

H. S. PIERCE & CO., Zanesville, Ohio.

MCDOWELL & McCORM, Portsmouth, Ohio.

R. McNEELY, Maysville, Ky.

J. P. JOHNSTON, Ripley, Ohio.

JOHN TODD, Covington, Ky.

G. L. HEATON, Cleveland, Ohio.

R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York [via Allentown]—and with fewer chances than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
L. L. HOUSTON, Gen'l Ticket Agent, Philadelphia.
H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:00 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton. RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day., Toledo & Day. Huntsville.....	5:20 P. M.	1:10 A. M.
Cin & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY Night in place of Saturday night.
Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	6:00 A. M.	11:10 P. M.
Indianapolis and Terre Haute.....	6:00 A. M.	1:13 P. M.
Decatur, Springfield & Quincy.....	11:30 A. M.	3:40 P. M.
Chicago Night Express.....	6:30 P. M.	16 00 A. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	5:00 A. M.	10:35 P. M.
Seymour Accommodation.....	2:00 P. M.	1:15 A. M.
Louisville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omni-buses call for passengers as usual.

P. W. STRADER.

General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

W. H. L. NOBLE.

General Ticket Agent Indianapolis & Cincinnati Railroad.

E. F. FULLER.

General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET

NEW YORK.

ALBERT BRIDGES.

JOEL C. LANN

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES
Tube CLEANERS, Steel Wire and Whalebone BRUSH-

Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enameled Iron WATER PIPE
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warm-
ing Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Pia-
za Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.
Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,
28 Platt Street, New York

N. W. BALDWIN, MATHIEU BAIRD. M. W. BALDWIN & CO. ENGINEER'S

BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of
LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned
THEODORE DEHON,
no 1 10 Wal Broadway, New York

EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



LOCOMOTIVE & RAILROAD CAR SPRING

MANUFACTURER,
WILMINGTON, : DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being alike on both sides, impossible to unravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.
Feb 12. WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

-AND-

Corrugated Iron Roofs

ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Spt. 2. MOSELEY & CO.

JAMES FOSTER, Jr. & CO.,
MATHEMATICAL AND PHILOSOPHICAL INSTRUMENT MAKERS,

S.W. CORNER FIFTH AND RACE,

Cincinnati Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

H. TWITHELL.

JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
Aug. 4, m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,
Engine and Car Axles, Pump and Piston Rods
Bar of all Sizes,
And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works
June 9.

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING
LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

-AND ALSO TO-

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay

JOHN ELLIS, President.
WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1 1/4 to 10 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from 1/2 inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—from 1/4 to 24 inches diameter, and branches for same. &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER,
THOS. T. TASKER, JR., S. F. M. TASKER,
HY. G. MORRIS.

BUTLER'S

MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroad offices for the South and West. For sale by 1,000 leading Stationers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, AUGUST 28, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion.....	\$1 00
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
“ column, single insertion.....	5 00
“ “ per month.....	10 00
“ “ six months.....	40 00
“ “ per annum.....	80 00
“ page, single insertion.....	15 00
“ “ per month.....	25 00
“ “ six months.....	110 00
“ “ per annum.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until a new arrangement is paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.30 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.

Cincinnati, Hamilton & Dayton—

Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.40 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	6.45 P. M.

Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.10 A. M.
		5.40 A. M.

Sandusky, Dayton & Cincinnati—

Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.10 A. M.

Marietta & Cincinnati—

Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.

Ohio & Mississippi—

Mail.....	5.00 A. M.	10.05 P. M.
Seamour Accommodation.....	2.00 P. M.	1.15 P. M.
Express.....	5.00 P. M.	5.53 A. M.

Indianapolis & Cincinnati—

Mail.....	6.00 A. M.	11.10 A. M.
Chicago Express.....	6.30 P. M.	10.00 A. M.

Dayton & Michigan—

Toledo, Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.

Cincinnati & Chicago Air Line—

Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.

Cincinnati, Wilmington and Zanesville—

Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.

Kentucky Central— (City time.)

First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

RAILROAD PROPERTY.

Not a few were the predictions at the beginning of the war that Railroad property would depreciate in value till it became entirely worthless and would bring wide-spread ruin in its downfall. This opinion was openly expressed even by intelligent men whose opinions on questions connected with their own business or profession would be entitled to great weight. We did not think so at that time, and much less do we think so now. Over a year ago we expressed our belief that so far from being injured by the present state of things, the railroads of the north would be benefited, while those of the cotton states would be entirely deprived of their regular mercantile business and seriously crippled, and those of Maryland and Virginia would be greatly injured. At that time the Rebellion had not fully developed its proportions nor the malignity with which it would be carried on. Neither was it quite certain that European sympathy with the attempt to destroy this country would induce such active interference on the part of individuals, as has plainly been shown. We judged simply from the natural changes, that must take place in commerce, in consequence of a state of war and an active blockade of certain sections.

The results of the past year have, we believe, fully justified our predictions, and those, who a year and more ago hastened to throw their Railroad shares and securities into market, and did their part towards a depression of prices, may now console themselves with the reflection that they have lost a good deal of money by their foolish fears and fancies. The Railroads of the North as a whole never did as good a business as they have done during the past year, and the receipts seem to continue to increase—even over the corresponding months of last year. The following table of the comparative earnings for the month of July in 1861 and 1862, of eighteen leading railroads fairly selected over the whole country, will fully illustrate our position.

	July, 1862.	July, 1861.	Gain.
New York Central.....	\$748,010	\$523,000	\$225,000
Erie Railway.....	587,009	372,765	214,244
Hudson River.....	159,768	114,814	44,954
Little Miami.....	107,759	100,535	7,224
Harlem.....	101,857	92,502	9,355
Michigan Central.....	172,189	123,377	48,812
Michigan Southern.....	181,000	116,600	55,000
Chicago and Rock Island.....	114,057	88,992	25,065
Chic. & Bur. and Quincy.....	220,210	169,465	50,745
Galena and Chicago.....	190,973	145,389	45,584
Illinois Central.....	249,329	189,219	60,110
Pittsbg., Ft. W. and Chic.....	243,673	180,429	63,244
Milw. & Prair. du Chic.....	168,721	107,116	1,605
Toledo and Walmsh.....	115,234	91,464	23,770
Cleveland and Toledo.....	69,938	56,134	13,804
Chic., Alton & St. Louis.....	89,215	73,474	15,741
Chicago and N. Western.....	93,021	76,897	16,124
Rome and Watertown.....	36,255	30,277	5,978

Total on 18 lines... \$3,580,808 \$2,662,130 \$922,669
Increase 34.68 per cent.

Here then we have an average increase of 34 per cent. in the present year over the corresponding month in the past year. And on most of the railroad lines of the country the earnings of the past year were above the average of preceding ones. Now, while we do not anticipate that the whole present year's busi-

ness will show the enormous increase of 34 per cent. over the past one, we still anticipate a large increase, and the footings up so far show that our expectations are well founded.

The experience of the year then shows that so far from business failing the railroads of the north, they never were so pressed for additional means of transportation and facilities for business. And that the pressure of business is very likely to continue, every circumstance, that can by any possibility enter into the calculation, tends directly to show. The cereal crops of the north have been large—abundant—bountiful. Those of Europe have been failures. The nations of Europe must live from the superabundance of the Northern States of America, and the railroads of these same Northern States must carry to the seaboard this very excess of the necessities of life on its errand of mercy across the Atlantic. The war can by no possibility be transported across the Ohio River. Hence, the business of these roads cannot be seriously interrupted. It is true an unguarded bridge may be burned here or there near the southern borders of these States. But a single armed guard stationed at each of these structures, which is after all but a trifling expense to the railroads, puts an end to all such danger, and makes the railroad travel of the North even in the midst of revolution and war as safe as in times of profound peace.

But it may be claimed that the vast number of men withdrawn from the active pursuits of the North will render us incapable of that wonderful production that has hitherto been our resource. We answer, not so. The energies of hundreds of thousands have been employed in constructing our great lines of internal improvement. These are mainly finished now, and those not yet finished can afford to wait completion. Population, especially in the loyal States, has greatly increased within the last decade, and agriculture has made wonderful strides in its labor-saving appliances. A year ago when nearly a million of men were called into the field, the same cry of short crops next year, was raised. Yet next year has come, its crops are mainly gathered, and they exceed in abundance the average. The wolf has not yet come to the door, and the fears of the timid were all imaginary.

Should the war then continue, we do not fear any very serious disaster to the North from short crops and famine staring us in the face. But the war must end. So far, except in newspaper telegrams, the North has hardly realized a state of war—its schools and churches open as usual, its railroads, its telegraphs, its steamboats all in operation, its workshops not missing the workman's hammer, and its steam engines still puffing and its water wheels still turning. Where in all this is the evidence of war? But look beyond the Ohio into the cotton states. No fields are white with the cotton snow—no busy harbors are freely exporting its products to supply the

wants of other nations. The puff of the locomotive is seldom heard, and when it does come, it bears with it the unwelcome mutterings of its conscripts, torn willing or unwilling from every home. The South has been making war in terrible earnest, while the north has thus far but sent out a portion of her surplus. The South has exhausted her resources and now calls for youth and old age. The South, if we admit the people are with their leaders, has lashed its fury to the highest pitch of rage. While the North has hardly yet begun to be so far in earnest as to make serious war. The South can call no more millions into the field, while the North can yet call two millions of free white men, all intelligently willing to spend their last drop of blood in the defense of that priceless boon of constitutional liberty bequeathed them by their fathers. The frantic rage of the South having boiled to its highest pitch must exhaust itself and subside. While the calm but terrible earnestness of the North can but increase in vigor and determination. The conscription of youth and old age at the South is but an evidence of exhaustion of her natural resources. While the North is even now sending out her half million volunteers within a call of scarcely two months.

We say then, the war must cease. The Nation's strength put forth for the Nation's life must triumph. And when the war is over, who even among the croakers will claim that railroad property will depreciate. That it has not depreciated during the war the present high quotations of railroad stocks is sufficient evidence.

FITCHBURG R. R. CO.

The following is the annual report of the Directors of this company to the annual meeting of stockholders in January last. The report says:

The corporation, in common with others, suffered in its business the past year, as the gross receipts prove. A comparison of these receipts with the like for the preceding twelve months shows them to be \$119,862 80 in arrears of those in 1860. At the same time, the expenses for 1861 are \$32,906 10 less than they were in 1860. The net earnings for the periods referred to give this result: \$86,956 70 less in 1861 than in 1860.

Peculiarly the position of the corporation on the first of December was this: \$205,603.99 of cash and cash funds in hand to meet the liabilities of the company, consisting of dues to connecting roads, and unclaimed dividends, together with the January dividend of 1862, the aggregate of which sum up \$160,801 92. Now, counting upon this amount as paid leaves the company free from debt, and a surplus in the Treasury at the date above mentioned, of \$44,802 07. The company have assets which are in no way needed for railroad purposes worth at least \$20,618 42,

and also fuel, iron, lumber, and other necessary working materials to the value of \$37,678 54, and all paid for.

WATERTOWN BRANCH.—A tender of reasonable support from parties desiring to use the branch, induced the resumption of passenger trains on the first of June, since which date cars have been run, and to the acceptance, it is believed, of those riding thereon. The support, though meagre at first, we hope will by and-by be commensurate at least to the expenses which now it is not.

The decease of Mr. Whittemore, in March last, made a void in the direction, which the board, in accordance with the 8th article of the by-laws of the corporation upon that subject duly filled by electing Mr. William A. Brigham of Boston, a large owner of the company stock.

The income and expenses for the year were as follows:

INCOME.	
From passengers.....	\$214,518 82
From freight.....	307,134 38
From mails.....	9,941 67
From rents.....	3,783 67
From interest.....	7,781 44
Total	\$343,168 98
EXPENSES.	
For renewals of iron and repairs of road.....	\$83,219 46
For repairs of locomotives.....	32,035 61
For stations and buildings.....	14,317 19
For bridges.....	7,153 72
For freight cars.....	17,132 16
For passenger cars.....	7,398 63
For gravel and hand cars.....	24 48
For fences, gates and signs.....	3,755 56
For fuel.....	39,203 65
Expenses freight department.....	52,076 68
passenger department.....	27,264 04
Wages switchmen, watchmen and flagmen.....	10,277 93
Removing snow and ice.....	4,504 82
Oil.....	5,491 94
Cotton waste.....	1,127 36
Taxes and insurance.....	6,882 51
Gratuities and damages.....	3,076 78
Office and law expenses, including salaries of president, treasurer and superintendent.....	10,457 50
	\$325,104 32
	\$217,054 66

The following is the balance sheet of the company:

BALANCE SHEET.	
DR.	
Total of construction, as per last report.....	\$3,540,000 00
Cash and cash funds.....	176,882 28
Notes receivable.....	24,559 04
Locomotives loaned trustees of Rutland and Burlington Railroad Company.....	12,900 00
Fuel.....	27,362 75
Stock materials.....	10,315 79
Real estate.....	7,718 42
United States mails.....	4,166 67
	\$3,803,900 95
CR.	
Capital stock.....	\$3,540,000 00
Profit and loss.....	209,299 03
Unclaimed dividends.....	3,645 60
Connecting roads.....	50,956 92
	\$3,803,900 95

The following are the characteristics of road:

Length of road.....	50 and 93-100 miles.
Length of single main track.....	None
Length of double main track 50 and 93-100	
Length of branches owned by the company, stating whether they have a single or double track.....	30 and 93-100 miles single track.

Aggregate length of sidings, and other tracks, excepting main track and branches.....	22 63-100 miles
Weight of rail per yard in main road.....	50 to 63 pounds
Weight of rail per yard in branch roads, (specify the different weights per yard) 40, 50, 53, 56	
Maximum grade, with its length, in main road.....	40 feet 5 12-100 miles long.
Maximum grade with its length in branch roads.....	50 feet 5,190 feet long
Total rise and fall in main road.....	739 1/2 feet in 312 feet fall
Total rise and fall in branch roads.....	454 feet
Shortest radius of curvature with length of curve in main road.....	318 feet, 500 feet long
Shortest radius of curvature with length of curve.....	385 feet, 500 feet long
Total degrees of curvature in main road.....	1,694 1/2
Total degrees of curvature in branch roads.....	1,879 1/2
Total length of straight line in main road.....	36 67-100 miles
Total length of straight line in branches.....	20 52-100 miles
Aggregate length of wooden truss bridges.....	1,406 feet
Aggregate length of all other wooden bridges.....	5,996 feet
Aggregate length of iron bridges.....	None
Whole length of road unfenced on both sides.....	None
Number of public ways crossed at grade.....	116 on main road and branches
Number of railroads crossed at grade.....	5
Remarks.....	
Way stations for express trains.....	None
Way stations for accommodation trains.....	9
Flag stations.....	15
Whole number of way stations.....	13 on main road and branches
Whole number of flag stations.....	30 " " "

DOINGS DURING THE YEAR.

Miles run by passenger trains.....	159,790
Miles run by freight trains.....	182,306
Miles run by other trains.....	7,188
Total miles run.....	349,184
Number of passengers carried in the cars.....	683,157
Number of passengers carried one mile.....	10,420,495
Number of tons of merchandise carried in the cars.....	325,500
Number of tons of merchandise carried one mile.....	7,768,515
Number of passengers carried one mile, to and from other roads.....	3,139,978
Number of tons carried one to and from other roads.....	5,282,883
Rate of speed adopted for express passenger trains including stops.....	None run
Average rate of speed actually attained by express passenger trains, including stops and detentions.....	None run
Rate of speed adopted for accommodation trains including stops and detentions.....	21 miles per hour
Rate of speed actually attained by accommodation trains including stops and detentions.....	21 miles per hour
Average rate of speed actually attained by special trains including stops and detentions.....	17 miles per hour
Average rate of speed adopted for freight trains, including stops and detentions.....	10 miles per hour
Estimated weight in tons of passenger cars (not including passengers hauled one mile.....)	5,210,247
Estimated weight in tons of merchandise cars (not including freight) hauled one mile.....	13,441,680

PACIFIC RAILROAD.—In addition to the commissioners named in the act to aid in the construction of the Pacific Railroad, the following gentlemen have also been appointed, viz.: Samuel J. Tilden and Henry V. Poor of New York; Wm. T. Griswold of Indiana, Robert W. Latham of the District of Columbia, and Dr. O. M. Mozenecraft of California.

BRIDGE ON THE CORNWALL RAILWAY.

The following description of the centre pier of the bridge over the River Tamar at Sal-tash, on the Cornwall Railway, and of the means employed for its construction was written by R. P. Brereton, Member of the Institute of Civil Engineers, for the *London Civil Eng. and Arch. Journal*, April, 1862:

This communication embraced, in a narrative form, a detailed account of the preliminaries connected with the Albert Bridge which crossed the River Tamar where it was only 1,100 feet wide, with precipitous banks and a depth of water to the surface of the mud of 70 feet. A dyke of greenstone trap intercepted the clay slate formation at this point, and cropped out to the surface above the water on the western bank of the river. It was ascertained from borings made in the bed of the river that rock extended from the eastern side to beyond the middle of the stream, covered with mud or silt to a depth of from 3 feet to 16 feet. Subsequently, a thorough examination of the bed of the river where a centre pier would probably be built, by means of 175 borings made within a cylinder at thirty-five different places, over an area of 50 feet square, enabled an exact model of the surface of the rock to be prepared, showing the irregularities and fissures that might be expected. Eventually it was decided, from the information thus obtained, to erect one pier only in the deep water, instead of three, as would have been necessary for the spans required by the Admiralty; and when it was determined to proceed with the construction of the bridge, in 1852, it was decided that there should be two spans of 455 feet, two of 93 feet, two of 83 feet 6 inches, two of 78 feet, two of 72 feet 6 inches, and nine of 69 feet 6 in.; the total length, including the adjoining land openings, being 2,200 feet.

The centre, or deep water pier, intended to carry the weight of the two main spans, consisted of a column, or circular pillar, of solid masonry, 35 feet diameter and 96 feet high, carried up from the rock foundation to above high-water mark. Upon this were placed four octagonal columns of cast iron, 10 feet diameter, carried up to the level of the roadway, which was 100 feet above high-water mark. Upon the tops of the columns, cast-iron standards were fixed to receive the ends of the tubes and chains which constituted the trusses of the bridge. The weight at the bottom of the masonry foundations was about $9\frac{1}{2}$ tons to the square foot, increased, when the bridge was loaded by passing trains, to about 10 tons per square foot.

In the construction of the masonry pier, a wrought iron cylinder, of boiler plates, 37 feet in diameter, and 90 feet in length, and open at the top and bottom, was sunk through the mud of the bed of the river to the rock. The water was then pumped out and the mud

excavated, the masonry being built up inside, and the cylinder above the ground afterwards removed. It was expected that, by forming a bank round the cylinder after being sunk to the rock, sufficient water-tightness would be ensured for getting in the masonry. To provide, however, for the contingency of excessive leakage, the cylinder was so constructed as to admit of the application of air pressure. As the surface of the rock, although very irregular and ragged, had a general dip to the south-west, the bottom of the cylinder was made with a corresponding bevel, one side being six feet longer than the other. A dome, or lower deck, was constructed inside, at the level of the mud, and an internal cylinder, 10 feet in diameter, open at the top and bottom, connected the lower with the upper deck of the cylinder. The 6 feet cylinder, previously used for the borings, was fixed eccentrically inside the other, and an air jacket or gallery, making an inner skin round the bottom edge below the dome, was formed, about 4 feet in width, divided into eleven compartments, and connected with the bottom of the 6 feet cylinder by an air passage below the dome.

Details were then given of the construction of the larger cylinder, and the mode of launching it and floating it to its position. When accurately adjusted over the intended site, water was gradually let in until the cylinder penetrated through the mud about 13 feet and rested on some irregularities upon the rock, which caused it to heel over towards the east about 7 feet 6 inches. By letting water in upon the dome or lower deck, and loading the higher side with iron ballast, the cylinder forced its way through the obstructions at the bottom edge, and took a nearly vertical position. The air and water pumps were then set to work, and the greater portion of the mud and oyster shells, which filled the compartments of the air-jacket at the bottom, was cleared out, and the irregular surface of the rock excavated; the bottom of the cylinder being now 82 feet below high-water. Subsequently, a leak having broken out through a fissure in the rock on the northeast, or higher edge, considerable difficulty was experienced in maintaining sufficient pressure with the air-pumps to keep the water down and the bottom dry. The leak was at length reduced by driving close sheet piling into the fissure. When at its full depth, the cylinder was 87 feet 6 inches below high-water at the lowest place, and then a hemp gasket was worked under the edge of the cylinder, all round the outside, to assist its water-tightness. A ring of granite ashlar, 4 feet in width and about 7 feet in height, was then built in the air-jacket; and a bank of clay and sand was deposited round the outside of the cylinder to compress the mud. When the water was pumped out of the cylinder below the dome, and the excavation of the mud was being proceeded with, a leak broke out and the

water overpowered the pumps. Additional engines and pumps were provided, and efforts were made to diminish the leakage, with varying success; but as it required four pumps to keep the water down to 54 feet, recourse to air pressure in the body of the cylinder below the dome became imminent, and preparations for its application were made. To provide against the buoyancy, or upward pressure against dome and cover, the 37 feet cylinder was loaded with 750 tons of ballast, in addition to its own weight of 290 tons. The pumps were then got in good order, and by continued pumping, succeeded in keeping the water down. The mud was excavated, the cylinder below the dome securely shored across, and the rock leveled, when the masonry in thin courses of granite ashlar in cement, in the body of the cylinder, was commenced. As soon as the masonry reached the level of the air-jacket ring, it was thoroughly bonded, the plates of the air-jacket being cut out as it proceeded. Upon the top of the bonding course, two courses of hard brick work in cement were laid, making a perfectly water-tight floor over the whole diameter of the column. Meanwhile, the masonry of the air-jacket, where the leak occurred, was taken down, and the leak was diminished by additional sheet-piling. The leak was discovered to have broken out at the same fissure as before, and had torn away the rock underneath the masonry of the air-jacket and bottom edge of the cylinder, but the masonry itself was undisturbed.

The next operation was to draw off the water above the dome and remove the ballast, to allow the masonry to be proceeded with, which it eventually did at the rate of from 5 to 7 feet in height per week. When it was 46 feet in height the influx of water was entirely stopped. After the masonry had been completed to the level of the plinth, the upper part of the cylinder was unbolted at the separate joints, and floated to the shore.

STEEP GRADES AND LOCOMOTIVES.

In no country in the world have Railroad engineers made use of such boldness in engineering, such originality and daring in the employment of steep grades and sharp curves, as in the United States. Many of our roads which surmount mountains, deemed impracticable by European engineers, have been the standing wonder of the old world. Mr. ZERAH COLBURN, well known as a Railroad writer in this country, has furnished the *London Engineer* a very interesting series of articles on Steep Grades and Locomotives, which we deem of sufficient interest to our readers to republish. Mr. Colburn says:

Mr. Andrew Ellison, jun., Chief Engineer of the Don Pedro II. Railway of Brazil, some time since addressed a note to several of the leading builders of locomotive engines in England and America, requesting proposals

for furnishing the locomotive equipment of the 2d section of the above road, in which the following data are given:

"The length of the line as located is about 260 miles.

"It is divided into four sections, of which the first and second constitute the main stem; the first section, thirty-eight miles in length, extending from Rio de Janeiro to Belem, has been in operation for three years, and is worked by engines built by Stephenson, England.

"Minimum radius of curvature, one fourth mile; maximum gradient, 1 in 80 for one mile in length.

"The second section, or mountain section, extends from Belem to the banks of the Parahyba river, a distance of twenty-nine miles. Here the line bifurcates, one branch running up and the other down the river Parahyba. The maximum gradients on the two branches will be 1 in 200, and the smallest radius of curvature 730 feet.

"The characteristics of the line of the second section, or mountain section, twenty-nine miles in length, for which special engines are required, are as follow: The line leaving Belem, where the mountain engines are attached, runs two miles level, or with very light gradients. Then commences the ascent of the Sierra. The gradients, commencing at Belem, are as follow, all of them ascending:

ft.		ft.	
300	1 in 333	5,400	1 in 83
1,500	1 in 166	13,100	1 in 55
2,500	1 in 555	2,700	1 in 66
6,300	Level.	13,200	1 in 55
1,700	1 in 62	800	1 in 100
1,300	1 in 71	5,600	1 in 55
4,000	1 in 66	200	1 in 100
25,700	1 in 55	7,200	1 in 75

Total rise 1,368 ft., minimum radius of curvature 739 ft., for 4,345 ft. Aggregate amount of curvature, 2,880 deg. Length, 91,500 feet.

"From the summit the line descends as follows:

ft.		ft.	
1,000	1 in 500	3,000	1 in 77
9,000	1 in 77	5,000	Level
1,700	Level, station	4,000	1 in 77
3,100	1 in 77	10,000	Level, station
1,200	Level	2,000	1 in 200
1,000	1 in 100	4,000	Level
2,000	Level	2,000	1 in 250
2,000	1 in 200	1,500	Level, station
6,800	Level		
2,200	1 in 100	62,500	

Total fall, say 300 ft.

Minimum radius of curvature, 739 ft.

"1st. Proposals are at present invited for three engines for Passenger business, capable of drawing a gross weight (excluding engine and tender) of not less than 110 tons at the mean rate of 20 miles an hour, from Belem to the summit tunnel, over the grades and curves hereinbefore set forth. Also for five freight engines, of first-rate power, to work over the same part of the line, at a mean speed of 12 miles an hour.

"In addition to a full specification of dimensions and workmanship, the character of

the material proposed to be used in the construction of the engines should be fully set forth, specifying whether iron, or brass are proposed in flues, flue sheets, and fire boxes, steel or iron in tyres, what tools accompany each engine and are included in the price, &c. Indeed it would be desirable to have the bids so varied as both to include and exclude what may be considered as 'extra,' in order that a more satisfactory comparison of the bids might be made.

"2d. Besides the main line and branches up and down the Parahyba, as before mentioned, a temporary line about four miles in length has been projected over the summit tunnel, to be constructed in case that delay in completing the latter should render such line expedient. This line would have grades of one in eighteen, combined with curves of 250 feet radius.

"3d. In case of the construction of this, two tank engines, especially adapted to its working, would be required. The track would be equal to that of the main line in point of solidity, and the whole of the through traffic of the latter would pass over it. While engines should be constructed with primary regard to their efficiency upon the temporary track, preference would be given to those calculated to be useful on the main line after their services upon the former might no longer be required.

"All bids should state price of each engine and tender complete, delivered upon ship-board, freight and insurance paid, and guarantee a certain performance upon the second section of the main line, or temporary track, as may be.

"Payment will be made as follows: viz., three-fourths upon receipt of bills of lading accompanied by policy of insurance, the remaining fourth of the price of each engine to be paid as soon as a trial shall demonstrate its power to fulfill the guarantee of the maker.

"Bids directed to A. Ellison, jun., chief engineer Don Pedro II. Railway, should be sent by English or French steamers so as to arrive in Rio de Janeiro previous to Jan. 1st, 1862, and it is desirable that each bid should be accompanied by testimonials of general superintendents or superintendents of motive power, as to the performance of engines of the respective makers upon roads presenting grades and curves similar to those of the Don Pedro II. Railroad."

Mr. Zerah Colburn having been consulted with reference to the proper engines required, addressed a letter to Major Ellison, from which the following valuable figures are taken:

The passenger engines required for your mountain division must be necessarily powerful to take up 110 tons—equal to six heavy and fully loaded American, or eighteen English passenger cars, at 20 miles an hour. Were the gradient only for two or three miles the work would be far less severe than it is on 15 miles. Apart from the Baltimore and Ohio

grades of 116 ft. per mile, for, in all, about 30 miles, there are few such grades as yours on the railways of the United States and very few in Europe. The Pennsylvania Central has one much like yours from Altoona to Gallitzin, a distance of 12 miles, rising 982 ft., or an average of 85 1-2 ft. per mile, upwards of 10 miles, however, rising at the rate of 95 ft. per mile on straight lines, reduced curves at the rate of .025 to .038 ft. per 100 ft. for each degree of curvature per 100 ft. Up this grade the passenger trains, averaging 5 1-2 long cars, or 120 tons (of 2,240 lb.), including leading engine and tender, are helped by a pushing engine, the speed up being 20 miles an hour. Both the leading and pushing engines are about 27 tons each in weight, besides tenders. On one occasion, when no pushing engine was used, a train weighing 63.8 tons was taken up at 20 1-2 miles per hour by an engine weighing 63,800 lb. (28.8 tons), or, with tender, 41.2 tons. The engine had 16 inch cylinders, 24 in. stroke, four 5 1-2 ft. driving wheels, 780 sq. ft. of heating surface, and 15 7-8 sq. ft. of grate. The consumption of water for 12 miles, or in 38 minutes' time, was from 6,481 lb. to 6,748 lb. (see report to J. Edgar Thomson, by J. W. Palmer, on burning coal in engines on Pennsylvania Central R. R.) Thus, the hourly consumption of water was about 10,580 lb., or nearly 1,060 gallons, the whole weight of engine, tender, and train being but 105 tons. Taking the gravity of this mass, and making an average pressure of 66 lb. per square inch upon the pistons, throughout their strokes, the work done being almost exactly 300 horse power.

The New York Central Railroad has a grade of 95 ft. per mile for nearly three miles out of Albany, and work it with heavy passenger engines and pushers, taking up from five to nine long cars, or 90 to 160 tons. The pushing engines are worked, however, with from 140 lb. to 145 lb. steam, which is higher than I would recommend you to adopt.

On the Virginia and Tennessee Railroad the mountain grade is twelve miles long on the east side, rising 68 ft. per mile. The company had eleven engines built in 1859 and 1860, by the New Jersey Locomotive and Machine Company, the passenger engines having 16 in. cylinders, 24 in. stroke, and weighing 28 tons; the freight engines 17 in. cylinders, 24 in. stroke, and weighing 29 tons.

The Western Railroad of Massachusetts has twelve consecutive miles of heavy grades, of which 2 1-4 rise at 55 ft. per mile, 7 1-4 at 78 ft., 1 mile at 70 ft., and 1 1-2 at 83 ft. The passenger trains are light and go up slow, the westward bound Express reaching Chester Factory at 1 21 p. m., and only reaching Washington summit (after stopping at Middlefield and Becket) at 2 p. m., giving 39 minutes for 12 miles, or an average of less than 18 1-2 miles an hour, including two stops. This is summer time. The accommodation trains average, in summer, 16 1-2 to 17 miles an hour

on the grades. The engines are 16 in. cylinders, 10 in. stroke, and weigh about 24 tons.

One of the longest inclines of considerable steepness in Great Britain is the Beattock incline of the Caledonian Railway. Ten miles of it rise at the rate of 1 in 76, or 69 ft. per mile. Mr. D. K. Clark has driven the ordinary passenger engines, with 15 in. cylinder, 20 in. stroke, and 6 ft. driving wheels up at 20 miles an hour, the whole weight of engine, tender, and train being but 70 1-4 tons. On another occasion he took up the express at 28 miles an hour, with the same engine, the whole weight being only 61 tons. The evaporation of water was 87 cubic feet, or 545 gallons per hour, the work done in the first trip being (gravity 2,071 lb., other resistances at 13 lb. per ton, 910 lb.=2,981 lb. at 1,760 ft. per minute) 159 horse power, and the consequent average pressure 47 1-2 lb. per square inch upon the pistons, throughout their strokes, the boiler pressure being about 90 lb.

[To be continued.]

CHICAGO BURLINGTON & QUINCY R. R.

In our last we gave the financial report of this company. We propose in this issue to give some of the working results which can not be otherwise than interesting to practical railroad men. The subject of economical fuel has received considerable attention on this road and a careful record of the cost of operation with various kinds of coal has been kept regularly. Of the results of these records the superintendent says:

I beg to call particular attention to statements showing the comparative performance of freight engines, when using ordinary Illinois coal and Brookfield coal. The latter is as good a bituminous coal as comes to this market, but still not considered equal to best of Pittsburgh or Ohio river coal. This trial has satisfied us that with the same grades and curvatures, same coal and water, and other circumstances equal, our coal engines can not be excelled by any coal burners in use. The impure coals of Illinois can not be economically burned in any less perfect combustion chamber than we use.

Copper is the only material that will endure in our fireboxes. Recent examinations prove that after three years' service it is uninjured, while iron will not last an average of eighteen months.

We must continue to use Illinois coal and a larger quantity per mile run, than would be requisite if the cost of transportation of foreign coal did not forbid its use.

The semi-bituminous coal, known as the "Cumberland," is beyond dispute the best for locomotive service, considered with reference to quantity required, and simplicity of firebox arrangement for its consumption, but its use must necessarily be limited, by cost of trans-

portation, to localities east of the mountains.

It will be noticed that Kewanee coal in the comparative tables is estimated at \$2 20 per ton of 2,000 lbs., against \$4 44 for Brookfield coal, but the true cost per ton was \$1 50, reducing the cost per mile to \$6 87. Considering the tonnage of the trains, this is a favorable result, making actual difference in favor of Illinois coal more than 40 per cent. over Brookfield coal. It will not escape observation that our freight trains run with coal during the year have cost 6 and 11-100 cents per mile.

The statement referred to by the superintendent is the performance of six locomotives using Kewanee coal during June, 1861, and of the same locomotives in the month of July, 1861, using Brookfield coal. The aggregate result was as follows:

	Kewanee coal.	Brookfield coal.
Number of miles run.....	11,295	10,530
Cords of wood consumed.....	46	47
Tons of coal consumed.....	395	232
Cost per mile for fuel.....	9.32	11.57
Pounds of coal used per mile.....	70	44 1-10
Miles run per ton of coal.....	28.59	45.38
Average number of cars each train.....	23	29 1-10

The cost of wood was \$4 00 per cord. That of Kewanee coal was \$2 20 per ton and that of Brookfield coal was \$4 44 per ton. The result shows that while the imported coal does the most work per ton, the Illinois coal from its cheapness is the most economical.

The present equipment of the road consists of 62 locomotive engines, (5 of which are leased to Grand Trunk Railway, and not mentioned in the locomotive report,) 27 first class passenger cars, 4 second class passenger cars, 9 baggage and mail cars, 815 house freight cars, 22 way freight and conductor's cars, 125 platform cars, 61 coal cars, 47 hand cars. The company has 40 gravel or dirt cars, a steam pile driver and car, a steam excavator and a wrecking car.

The following are the results of the performance of all the locomotives for the year:

LOCOMOTIVE REPORT.

Total miles run on passenger trains.....	254,529
" " freight trains.....	593,362
" " miscellaneous trains.....	219,134
" " all trains.....	1,067,025
Cost per mile for repairs.....	6 15
" " oil, tallow, and waste.....	77
" " fuel.....	7 13
Total cost per mile run.....	14 05
Miles run per pint of oil.....	15 62
" " cord of wood.....	47 60
" " ton of coal (Illinois).....	33 61
Number of miles run by wood-burners.....	478,061
" " coal-burners.....	588,964
Average cost per mile for fuel for wood-burners.....	8 44
" " " " passenger trains.....	6 84
" " " " freight.....	14 55
" " " " for coal-burners.....	6 11

The cost of wood as before given was \$4 00 per cord and that of coal \$2 20 per ton. The actual cost of Illinois coal is, however, only \$1 50 per ton, showing still greater advantages for coal over wood. And it is, moreover, quite certain that the price of wood will increase.

The total movement of passengers of all classes was 273,470½ and their total mileage was 16,794,045½. The average mileage per passenger was as follows; between Chicago

and Galesburg 75.41 miles, between Galesburg and Burlington 26.85 miles, between Galesburg and Quincy 53.54 miles. The average earnings per passenger per mile were as follows: between Chicago and Galesburg 2.457c; between Galesburg and Burlington 2.995c; and between Galesburg and Quincy 2.765c.

The following are the details of the tonnage of the road as given in the report:

TONNAGE HAULED ONE MILE.

364 miles—Eastward.....	58,717,691
Westward.....	18,656,191
Total.....	77,373,753
Total tons of freight forwarded from and received at Chicago during 1861 was.....	395,156
Same in 1862—Eastward.....	336,254
Westward.....	90,277
Total.....	426,631
Excess in 1862.....	31,475
Number of tons hauled one mile of freight received at and forwarded from Chicago—	
Eastward.....	45,733,112
Westward.....	11,975,651
Total.....	57,708,753

TONNAGE ON CHICAGO, BURLINGTON & QUINCY RAILROAD, 168 MILES.

Average tonnage to each loaded freight car.....	
" " " " and empty freight car....	

PEORIA & OQUAWKA RAILROAD.

Average tonnage to each loaded freight car.....	7
" " " " and empty freight car....	4

QUINCY & CHICAGO RAILROAD.

Average tonnage to each loaded freight car.....	8
" " " " add empty freight car....	5

GENERAL AVERAGE FOR 310 MILES.

Average tonnage to each loaded freight car.....	7
" " " " and empty freight car....	5
" earnings per ton per mile for the 168 miles.....	2
" " " " " P & O road (W. D.).....	3
" " " " " (E. D.).....	4
" " " " " Q & C road.....	2
" " " " " the whole line,	
364 miles.....	2

The following are the officers of the road for the year:

John Van Nortwick, Chauncey S. Colton, James F. Joy, Erastus Corning, John M. Forbes, John W. Brooks, Henry P. Kidder, Sydney Bartlett, Robert S. Watson, William Boott, Edward L. Baker. John Tan Nortwick, *Pres't*; Edward L. Baker, *Chairman of Board*; Charles G. Hammond, *Sup't*; Amos T. Hall, *Treas. and Sec'y*.

INCREASE OF FARES.—The increase of Railroad fares in consequence of the National Tax is not so large as we stated in our last issue. Between Cincinnati and New York it will only amount to fifty cents. The Lake Shore Line have determined to make no increase. The New York Central only increase the fare to the point allowed by the State Laws. So also the Little Miami only increase theirs to the charge allowed by the State Law. The companies seem to have no disposition to speculate from the advantages offered them; but rather to desire to meet the traveling public and furnish them all the facilities in their power.

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	R to of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N. Y. & Pa.	64	48	\$	\$	\$	\$	\$	Sept. 30, 1860	Maryland Sterling.	3,000,000	5			
Baltimore and Ohio.....	Md.	64	380	13,111,800	10,781,833	566,07	3,922,203	2,305,788		Mortgage.....	2,500,000	6	95	1885	
do do										"	700,000	6	84	1880	
do do										"	1,125,000	6	90	1875	
do do										"	1,000,000	6		1867	
do Washington Branch.....	Md.	30		1,650,000						"	791,000	7	55	1866	
Bellefontaine and Indiana.....	Ohio & Ind	118	68	1,859,813	1,256,750	139,120	314,090	8,795	Dec. 1860.	1st Mortgage.....	160,000	7		1870	
do do										2d "					
Buffalo and State Line.....	N. Y. & Pa.	122 1/2	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	132 1/2	75	1,101,432	1,428,000		104,860	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	96		3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	3,750,000	6	100	1864	
Central Ohio.....	Ohio.	137	137	In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7	62 1/2	1861	
do do										1st "	800,000	7	80	1864	
do do										2d "	80,000	7	64	1865	
do do										3d " S. F.	950,000	7		1875	
do do										4th " S. F.	1,365,000	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	105	1865 & 1870	
do do										2d "	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	235,787	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7			
do do										2d "	1,500,000	7			
Chicago and Milwaukee.....	Wis.			No report	received.					3d "	1,000,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F.	1,250,000	7	80	Feb & Au. 1	
do do										Gen'l 1st Mortgage.	3,600,000	7	52	Feb. & Au. 1	
do do										2d "	2,000,000	6	26	May 1.	
Chicago and Rock Island.....	Ills.	68 1/2	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	105	1870	
Chicago, Burlington and Quincy.....	"	86	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	110	1883	
do do										" 2d " S. F.	813,000	8	108	1890	
do do										1st Mor. Chi. & Aur.	393,000	7		1867	
do do										2d "	303,000	7		1869	
do do										1st "Cent. Mil. Tract	300,000	7		1864	
do do										2d "	215,000	8		1868	
Chicago, Iowa and Nebraska.....		82		No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	99	60	2,155,800	1,356,000		644,928	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	950,000	7	100	1880	
Cincinnati Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
do do										Income.....	305,500				
Cleveland and Mahoning	Ohio.	68 1/2		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d "	400,000	7			
do do										3d "	341,000	7			
Cleveland and Pittsburgh.....	Ohio & Pa.	25 1/2	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7	99 1/2	1873	
do do										3d 2d Ex.....	1,165,000	7	81	1865	
do do										4th 3d Ex.....	1,154,000	7	64		
Cleveland and Toledo.....	Ohio.	53 1/2	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jan. 1st Div.	359,000	7	96	1867	
do do										1st " " 2d Div.	263,000	7		1872	
do do										2d " " "	265,000	7		1862	
do do										1st " Tol. Nor. & Cleve	521,000	7		1863	
do do										2d " " "	293,300	7		1861	
do do										Junction Income..	44,500	7		1862	
do do										C. & T. Income..	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	121	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	125	98 1/2	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	99	1861	
do do										2d "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	105 1/2	54 1/2	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700	7	92	1860 to 1866	
Columbus, Piqua and Indiana.....	"	103	143	In hands of Receiver.	2,176,666	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666	2,512,000	292,267	375,002	212,107		2d "	2,212,000	8			
do do										1st Mortgage.....	300,000	7	70		
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	2,500,000	7	90	1875	
Detroit and Milwaukee.....	Mich.	186		No report						2d "	1,000,000	8		1866	
do do															
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	798,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		96,061	1,219,100	249,868	124,140			2d "	18,000				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d "	18,000				
Galena and Chicago Union.....	Ills.	73 1/2	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000	104	1862 & 1863		
do do										2d "	1,520,000	100	May 1, 1875		
Great Western	Ills.	175		1,600,000	2,391,000		455,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report	75,000	63,141	13,573							
Greenville and Miami.....	Ohio.	32		300,000	473,000										
Hannibal and St. Joseph.....	Mo.	206		1,041,066	10,354,000	220,306	996,907	512,933	Sept. 1, 1860.	Land Mortgage.....	5,000,000		26		
do do										Mortgage Conv.....	1,354,000		45		
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	927,000	6	30	1873	
Hudson River.....	N. Y.	51 1/2	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	110	1869 & 1870	
do do										2d " S. F.	2,000,000	7	106 1/2	1880	
do do										3d " " "	1,840,000	7	104	1875	
Illinois Central.....	Ills.	63	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	28,000	7	100	1863	
do do										Construction.....	12,853,400	7	100	1875	
do do										"	4,115,000	6	97	1875	
do do										Debentures.....	42,740	7	96		
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	60,000				
do do										2d "	578,000	10			
do do										Income.....	38,700	11			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,234	140,689	448,858	230,834		1st Mortgage.....	500,000	7		1866	
do do										2d "	400,000	7	85		
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,932	36,773	Dec. 31, 1860.	Real Estate Mortg.	200,000	7	85		
do do										1st Mortgage.....	649,984				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d "	314,000				
Iron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jacksonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st	2-9,000	7	75	1861
do										2d	392,000	7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,632	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st	250,000	7		
do										2d " Conv.	1,000,000	7		
do										3d	600,000	7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	901,000		89	
do										2d " E. D.	1,000,000			
do										1st Land Grant W D	4,000,000		21	
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report		June 30, 1861	1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.	99		514,433	130,000		104,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1863
Little Miami.....	Ohio.	61					1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000			
Louisville and Frankfort.....	Ky.	65		1,169,59	334,519		243,910	95,679	June 30, 1861	1st Mortgage.....	248,000			
do										1st Mortgage.....	240,000	7		
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,070	807,934	461,970	July 1, 1861	1st " Lebanon Br.	400,000			
do										1st " Memphis Br.	500,000			
Louisville, New Albany and Chicago..	Ind.	288		2,500,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,235,300	87,969	230,563	99,000	Dec. 31, 1860.	1st Mortgage	600,000	7		1861
Marietta and Cincinnati.....	Ohio.	203		8,561,213	190,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868
do										2d	2,000,000	7		
do										3d	1,500,000	7		
do										Sterling Income...	333,000	4		
do										Domestic	928,617	6	92½	1872
Michigan Central.....	Mich.	68½	284	6,037,724	7,968,489	125,000	2,126,699	910,169	May 31, 1861	1st Mortg " Sterling	467,483	8	84	1869
do										1st " Conv.	500,000	8	96	1890
do										1st " unconv.	230,000	8	106	1869
do										1st " Dollar Conv.	2,598,000	8	108	1882
do										1st " S. F. Conv.	4,133,000	8	99	1860
Michigan South'n & North'n Indiana	Mich &	314	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. S.	991,000	103		1861
do										" Nor. Ind.	985,000	103		1868
do										" Goshen Line.	1,168,440	103		1885
do										S. F. Toledo	2,850,000	101		1885
do										2d Mortgage	2,465,000	89		1877
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d	20,000	8		
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8		
do										2d	600,000	8		
Milwaukee and Prairie du Chien.....	Wis.	34	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7		1891
Milwaukee and Western.....	Wis.	71		No report										
Mississippi and Missouri.....	Iowa,	35		No report						1st Mortgage Conv.	1,000,000	7	96	
do										2d " S. F.	400,000	8		
do										Oskaloosa Div.	1,425,000	7		
do										Land Grant.....	7,000,000	102½		
New Jersey.....	N. J.	34		4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000	7		
New Jersey Central.....	N. J.	64		2,210,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	3,000,000	110		
New York and Erie Pref.....	N. Y.	62½		Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860.	2d	4,000,000	110		
do		38½								3d	6,000,000	104		
do										4th	4,900,000	93		
do										5th	1,792,500	82½		
New York and Harlem Pref	Conn.	40½	138	5,717,190	6,035,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,050,000	7	105½	1873
do common		16								2d	1,000,000	7	101	1864
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7	94	Dec. 1, 1866
do											975,000	6		Oct. 1, 1875
New York Central.....	N. Y.	93½	536	24,000,000	14,613,005	none.	7,369,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,923,000	101		May 1, 1883
do										Mortgage.....	3,000,000	6	103	June 15, 1864
Northern Central.....	Pa.	138		2,260,000	5,800,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,086,500	7		1885
North Missouri.....	Mo.			2,433,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6		
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased.	9,280,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6		
do										2d	316,995			
do										Construction.....	4,637,920			
do										Income.....	3,591,185			
Ohio and Mississippi, Western Div....	Ills.	148			3,202,403		No report			State Loan.....	7,000,000	6		
Pacific.....	Mo.			3,199,662	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	" " S. W.	2,800,000	6		
do										Construction.....	4,500,000	6		
Pennsylvania.....	Pa.	339		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,900,000	6	104½	1888
do										2d	2,319,000	6	92½	1875
do										3d " Sterling.	1,357,440	6	89	1875
do										State Works.....	7,200,000	5		
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report			1st Mortgage	2,300,000	6	99½	1894
Philadelphia, W. and Baltimore.....	Del.	98		5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863
do										1st Mort. O. & P.	1,000,000	7	96	1865
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,135	1,757,273	2,355,313	761,555	June 30, 1861	2d	730,000	7	83	1868
do										1st " O. & I.	1,000,000	7		1872
do										2d	380,000	7		1873
Pittsburgh and Connellsville.....	Pa.	49		1,753,826	1,292,700	67,869	80,554	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000	7		
Racine and Mississippi.....	Wis.	104		2,703,720	1,417,900	1,053,328	220,830	68,435	May 10, 1861.					
Sandusky, Dayton and Cincinnati. ..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856
do										"	997,000	7		1866
do										"	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,924	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1866
Santa and Hooking Valley.....	Ohio.	56		404,975	500,000	100,000	110,200	53,100						
Springfield, Mt. Vernon & Pittsburgh.	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000	7		
do										2d	450,000	7		
Stevensville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d	900,000	7		1865
Terre Haute, Alton and St. Louis.....	Ills.	208		No report						1st Mortgage Conv.	1,000,000	7	110	1862
do										2d " Conv.	2,000,000	7	92	1868 & 1871
do										1st " Del. & Ill.	317,000	7		1873
Terre Haute and Richmond.....	Ind.	100	73	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	92	1866
Toledo, Wabash and Western.....	Ohio & Ind	243		2,123,506	5,996,049	52,389	234,545			1st Mortgage.....	3,400,000	7	92	Aug. 1, 1866
do										2d	2,500,000	7	70	Nov. 1, 1871
do										Mort. Coupons....	98,049	7		1860 to 1864

IRON PLATING FOR VESSELS.

The recent engagement between the Rebel ram Arkansas and the Union gunboat Essex gives some additional interesting facts as to the best method of plating vessels of war. The Essex is plated with iron an inch in thickness, but under this thin plating she has a plating of india rubber also an inch thick. The Arkansas was heavily plated. In the first engagement under the batteries at Vicksburg the Essex was under the fire of three very heavy batteries for two hours and a half at a distance varying from 80 feet to 100 yds. Some of these batteries mounted heavy ten inch guns. Others mounted seven and a half inch rifled guns. Commander Porter in his report says:

"The Department may have some idea of the amount and number of shot, shell, plug and rifle missiles thrown at this vessel when they are informed we were two hours and a half under fire of seventy heavy guns in battery, 20 field pieces and three heavy guns on board the ram. During that time this vessel was heavily struck forty two times, and only penetrated twice."

In the second engagement the Essex ran within a short distance of the Arkansas and there received and delivered fire till the Arkansas was pierced by the balls of the Essex and then set on fire by an incendiary shell and destroyed. The Essex was not injured.

This would seem to demonstrate the superiority of the method of plating used upon the Essex and to prove that one inch iron, when backed by rubber packing, is far superior to heavy plating laid upon solid wood.

BRIDGES.—A very important hint to guard bridges was given on the Marietta & Cincinnati Railroad last week. Two bridges near Loveland, situated on a curve where it was impossible to see any great distance ahead, were set on fire by incendiaries and consumed, resulting in the destruction of a locomotive and two freight cars. It is quite probable that the perpetrators of this diabolical act intended the destruction of a train of passenger cars. But in this they were foiled. We understand that one of the parties supposed to have been concerned in the crime has been arrested, and will be held to answer for this wholesale injury to society. It is to be hoped that all implicated will be brought to justice.

This is, as we stated, a loud warning. The actual loss of property caused by this one act of incendiarism would have paid for guarding all the bridges on the road a whole year, and the company would have saved the inconveniences and annoyances to which it has been subjected in consequence. We understand the Little Miami and other companies have kept up the guards on their bridges with great care.

IMPORTANT RAILROAD SUIT IN NEW JERSEY.

The following report of the proceedings in an important suit brought by the Camden and Amboy Railroad and Transportation Co., and the Delaware and Raritan Canal to test the validity of their chartered rights, we take from the *U. S. Railroad and Mining Register*. The suit is still pending.

The Delaware and Raritan Canal and Camden and Amboy Railroad and Transportation Companies agt. the Raritan and Delaware Bay Railroad Company, the Camden and Atlantic Railroad Company, and others. Under a legislative act of March 2, 1832, and its supplements, the Camden and Amboy Railroad Company has claimed the exclusive right of the transportation between New York and Philadelphia. The grant is, in substance:

"That it shall not be lawful at any time during the continuance of the charter to construct any other railroad, without the consent of the companies, which shall be intended or used for the transportation of passengers or merchandise between the cities of New York and Philadelphia, or to compete in business with the Camden and Amboy Railroad."

The rival road, however, is in process of construction, the intention being to have it completed toward the close of August, with the low rate of fare of \$2 between New York and Philadelphia. The new line is known as the Raritan and Delaware Bay Railroad, the Company being granted general powers to construct a railroad from some point on the shore of the Raritan Bay to the lower peninsula of New Jersey, intersecting the Camden and Amboy Railroad. The northern terminus of the line is on Raritan Bay, 23 miles distant from New York. The main line diverges gradually to the south-west, and, crossing Ocean and Burlington counties, reaches the Camden and Atlantic Railroad, in Camden county, where it is proposed to form the connection with the last named road, about 20 miles from Philadelphia.

Action has been brought to restrain the defendants from the construction of the road. The complainants filed their bill on the 18th July. On Tuesday morning, July 29, the case was brought before Chancellor Greer, at Trenton, N. J. Messrs. Joseph P. Bradley of Newark, John B. Stockton of Trenton, Courtland Parker of Newark, and R. S. Field of Princeton, appeared for the complainants, and Chancellor Williamson, Attorney-General Frelinghuysen of New Jersey, ex-Gov. Peter D. Vroom, A. O. Zabriskie of New Jersey, Judge T. B. Carpenter of Camden, and Theodore Cuyler of Philadelphia, for defendants.

The latter were ready for the proceedings, but the complainants asked for time to read the answer and affidavits of defense. This was granted, the court adjourning for that purpose to three o'clock P. M., when the case was resumed and continued till six o'clock in the evening.

The answer denies the entire equity of the complainant's bill, and also the constitutional validity of the special privileges of the Company. It moreover asserts that the complainants acquiesced in the obtaining of their charter by the defendants, and that they have stood by, after being notified in writing of the defendant's intention to construct this road, and permitted the investment of large sums of money, and the road to approach almost completion, before applying for an injunction; and that, in consequence, they have no equity for the special relief they seek.

On Wednesday morning, July 30, the reading of the answer and affidavits was resumed, and when the argument was about to proceed, Mr. Bradley, on behalf of the complainants, asked leave of the court for further time to amend their bill in one respect, and to provide affidavits in answer to new matter, which, he contended, was presented by the respondents in their answer. The amendment proposed to the bill was in stating the acceptance by the Company of the act of 1854, modifying their charter. The new matter to which it was proposed to make reply consisted in allegations of the acquiescence by the complainants in the obtaining of their charter by the defendants, and in the line adopted by them for their road; also, of allegations in the answer that the route they had selected was in conformity with their charter, and was the best the topography of the country through which the road passed would permit.

Mr. Bradley further asked for a restraining order of the court, preventing the defendants from proceeding with their work during the pending of the case. After argument by Messrs. Bradley and Field, for the complainants, and Ex-Gov. Vroom and Mr. Frelinghuysen for the respondents, the Court refused to discontinue the progress of the work. The request for the amendment of the bill was allowed, and the case was continued to August 12, the complainants to take further affidavits, if so desiring, and the respondents to make answer in reply.

In the case of the application of this company for an injunction to restrain the Delaware Bay Railroad from connecting with the Camden and Atlantic Railroad at Absecon, on the ground that it would make a competing road between New York and Philadelphia, and would be an infringement of the right given the Camden and Amboy Railroad by the State, the Chancellor gave his opinion on the 18th instant adversely to the Camden and Amboy Railroad Co.

The Chancellor presented the rights of the respective parties in some fifteen points, and denied the injunction on the ground that the rights of the complainants had not yet been infringed, and could not be, until some unlawful act had been committed.

The bill and answer were then dismissed with costs.

The argument in this case continued on for more than a week.

The defendants contended that it was not their intention to make a competing road between the two cities.

The following is the decision of the Chancellor:

The Delaware and Raritan Canal and the Camden and Amboy Railroad and Transportation Companies, complainants, vs. The Raritan and Delaware Bay Railroad Company, the Camden and Atlantic Railroad Company and others, defendants.

The necessity for an immediate decision of this cause has allowed no opportunity for the preparation of an extended opinion; but the thorough research and elaborate arguments of counsel (for which I acknowledge my indebtedness) have satisfied me as to the principles which must be recognized and the conclusions which must be adopted in the disposition of the motion now before the court. Those principles and conclusions I shall,

therefore, now state without any attempt to present in detail the reasons upon which they are founded.

1. The complainants have, by virtue of their contract with the State of New Jersey, the exclusive franchise of transporting passengers across the State between the cities of New York and Philadelphia, and are entitled to the protection of a Court of Equity in the enjoyment of that franchise.

2. There is no sufficient evidence in the cause that the rights which the complainants in their bill seek to maintain have been impaired or relinquished by consent, or the complainants' right to protection forfeited by acquiescence in the acts of the defendants.

3. The incorporation of the Camden and Atlantic Railroad Company to construct a railroad across the State from Camden to the sea, at or near Absecom Inlet, and the incorporation of the Raritan and Delaware Bay Railroad to construct a railroad from Raritan Bay to Cape Island were no violation on the part of the State of their contract with the complainants.

4. The junction of the Camden and Atlantic Railroad with the Raritan and Delaware Bay Railroad at their (necessary and legitimate) point of intersection, so as to form a continuous though circuitous line of railway from Camden to the Raritan Bay, and which with the aid of steamboats upon the Delaware river and Raritan Bay will form a continuous line and which, by possibility, may be used for the transportation of passengers and merchandise across the state between the cities of New York and Philadelphia, constitutes no violation of the complainants' right.

5. There is a legitimate purpose for which these roads so united may be used, viz: The transportation of freights and passengers from points and places within the State of New Jersey along the line of the respective roads and between those points and the cities of New York and Philadelphia, respectively.

6. There being a legitimate purpose for which these roads may be constructed and used, and for which a junction between them may be formed, the defendants cannot be restrained from effecting such junction merely because it may be perverted to an unlawful purpose.

7. The fact that either of the said roads, or the connecting link between them, is being constructed without lawful authority, either because no survey of the route has been filed in the office of the Secretary of State or because it is not formed in conformity to the route prescribed by its charter, constitutes no ground for equitable relief against such construction, at the instance of the complainants, unless their rights will be thereby violated.

8. Such unauthorized construction and connection of the roads may afford evidence tending to show a fraudulent design on the part of the directors, to violate the rights of the complainants, but it is not sufficient, upon a motion for a preliminary injunction, to overcome the answers of the defendants under their corporate seals, and under the oaths of their officers, who are made defendants for the purpose of discovery.

9. Under the views taken by the court of the true construction to be given to the contract between the State and the complainants, the answers of the defendants is a full denial of the equity of the complainants bill, and renders the allowance of an injunction before the final hearing improper.

10. If the roads of the defendants, by means of the contemplated connection, should

be used for the purpose of transporting passengers or merchandise between the cities of New York and Philadelphia, or to compete the business with the railroads of the complainants between the said cities in violation of the contract between the State and the complainants, full and adequate protection to the complainants' rights can be given by injunction, restraining such use of the road.

11. No duties imposed upon the defendants in the prosecution of their legitimate business by their acts of incorporation, and no contract into which they may have entered or may enter with third persons or with each other, can justify any violation of the rights of the complainants, or afford protection against the consequences of any such violation.

12. The State is no party to this suit. Her sovereignty cannot be entrenched upon, nor her right of eminent domain impaired, by any decision in this cause, nor by any unauthorized or illegal acts which may be done or permitted by the defendants under color of her authority.

13. If the roads of the defendants, by means of the connection that may be made between them, either lawfully or unlawfully, shall be fraudulently used in violation or evasion of the sovereign rights of the State, she has the power and is fully competent to guard those rights.

The application for an injunction must be denied, and the rule to show cause discharged, with costs."

MONETARY & COMMERCIAL.

August, always a dull month, has sustained its reputation this year. Speculation is dull—dead—does not exist—and regular business confines itself chiefly to its own capital, hence there is little demand for money. Rates are as we have hitherto quoted. For good borrowers on prime paper easy at 6 to 8 per cent in the regular houses. Outsiders aim to get 10 per cent, but it is difficult to make satisfactory investments at the latter rate. The country has been somewhat anxious about the movements of the Army of the Potomac. There is a very large number of troops concentrated in one neighborhood and a vague idea of some great battle imminent, but just what is going on no one but the actors in the drama and the high officials of the government know. That we ought to gain a great Union victory every one believes. Such a victory after the raising of the siege of Richmond would greatly strengthen confidence and depress efforts to hasten foreign intervention.

Exchange is in fair demand and remains steady at previous quotations. The buying rate is $\frac{1}{2}$ to $\frac{1}{4}$ discount. Selling rate is par.

The following are the quotations:

	BUYING.	SELLING.
New York.....	$\frac{1}{2}$ @ $\frac{1}{4}$ dis.	par.
Boston.....	$\frac{1}{2}$ @ $\frac{1}{4}$ dis.	par.
Philadelphia.....	$\frac{1}{2}$ @ $\frac{1}{4}$ dis.	par.
Baltimore.....	$\frac{1}{2}$ @ $\frac{1}{4}$ dis.	par.
Gold.....	14 @ 15 prem.	15 @ 16 prem.
Silver.....	8 prem.	10 prem.

The supply of demand notes is light—few offering. The rates paid to day were $6\frac{1}{2}$ and 7 per cent, the latter when large sums were offered.

In uncurrent funds we notice larger offerings of Southern money. Quotations are as follows:

BANKABLE FUNDS.

State Bank of Ohio.	Kentucky.
Free banks in good credit.	Treasury Notes.
State Bank of Indiana.	

UNCURRENT FUNDS.

New York City.....	$\frac{1}{2}$ dis.
Philadelphia.....	$\frac{1}{2}$..
New York State.....	$\frac{1}{2}$..
New England.....	$\frac{1}{2}$..
MISSOURI—	
Farmer's Bank.....	5 ..
Union Bank.....	10 ..
All others.....	1 ..
Iowa.....	1 ..
Eastern Virginia.....	40 @ 50 ..
Wheeling, Virginia.....	$\frac{1}{2}$..
Branches.....	2 @ 3 ..
Except Jeffersonville.....	20 ..
Louisiana.....	25 ..
PENNSYLVANIA—	
Pittsburgh.....	$\frac{1}{2}$..
Interior.....	1 @ 2 ..
MARYLAND—	
Baltimore.....	1 ..
Interior.....	2 ..
Hagerstown.....	3 ..
Michigan.....	1 ..
Canada, solvent.....	5 prem.
Union and Planters' Bank of Tennessee.....	25 dis.
Bank of Tennessee.....	30 ..
Tennessee stocks, solvent.....	40 ..
" unsecured.....	40 @ 60 ..
North and South Carolina.....	50 @ 55 ..
Georgia.....	50 @ 55 ..
Alabama.....	50 @ 55 ..
Indiana free banks, solvent.....	$\frac{1}{2}$..
" discredited.....	5 @ 10 ..
Illinois banks.....	2 @ 50 ..
Wisconsin banks.....	2 @ 50 ..

General business is dull and will continue so until after the day fixed for the draft. Country merchants will not come in till after that matter is settled.

The New York Tribune of Monday says:

"Wall street is firm this morning, under the report of a much-looked-for military success. Early in the session, a dispatch was read, reporting a masterly movement of Sigel, resulting in the capture of some 2000 prisoners." This encouragement was seized upon with avidity, new buyers appearing in the market and prices improved materially, especially in the western roads."

Gold was firm at the opening, and sold at $115\frac{3}{4}$, but under the reports from Virginia became weak, and sold as low as $115\frac{1}{4}$. At the close $115\frac{3}{4}$ was bid. The transactions have not been very important. The arrival of a million from California over supplied the demand. The business in 7.30 Treasury Notes was active toward the close, with an upward tendency in prices. At the close $104\frac{3}{4}$ was bid. Demand notes for Custom-House use are in moderate demand at about previous quotations, $107\frac{3}{4}$ to $107\frac{7}{8}$. Indebtedness certificates are in good inquiry, and selling at $99\frac{5}{8}$ to $99\frac{3}{4}$.

Mr. Chase has just borrowed in New York \$3,000,000 to meet the exigencies from the demands in consequence of the new levies of troops and to bridge over the interval before the new currency can be furnished in sufficient amounts by the engravers and used 7.30s as the most available asset in his possession. These were placed satisfactorily at 104. The loan was promptly taken. Money is still abundant in New York at very low rates. On demand with current collaterals it is quoted

at 3 to 5 per cent. Gilt edged paper 4 to 6 per cent and very scarce.

Foreign exchange is quiet with a fair amount offering. Quotations are as follows: London 127 $\frac{1}{2}$: Paris per dollar 4f. 42 $\frac{1}{2}$ c.: Amsterdam per guilder 48 $\frac{1}{2}$ c.: Hamburg per Mark Banco 42 $\frac{1}{2}$ c.: Bremen per Rix dollar 92c.

The market for Provisions in this city is not very active. Wheat, strictly prime Red is quoted at 82c. Wheat, Ohio and Indiana, 85 to 87c. Kentucky 90 to 95c. Flour, superfine, \$4.00 to \$4.10. Extra, \$4.15 to \$4.25. Family, \$4.30 to \$4.50. Corn 33c. Oats 49 to 50c. Rye 54 to 55c. Barley 70 to 75c. The quotations for provisions are as follows:

The asking prices are 4 $\frac{1}{2}$ c. for bulk Shoulders; 5 $\frac{1}{2}$ c. for Sides; 5c. for Bacon Shoulders; 5 $\frac{1}{2}$ c. for rib Sides, and 6 $\frac{1}{2}$ c. for clear do., with a good demand at $\frac{1}{2}$ c. below these figures.

The earnings of the Chicago, Burlington, and Quincy Railroad Line (310 miles) in the second week of August, 1862, were \$53,491 34, against \$41,163 22, for corresponding term in 1861, showing a gain in 1862, of \$12,328 12.

The Milwaukee and Prairie du Chien Railway earned the second week of August:

Second week August, 1862.....	\$12,750 51
Second week August, 1861.....	16,561 53
Decrease.....	\$3,811 02

The receipts of the Housatonic Railway Company are:

For month of July, 1862.....	\$24,978 26
For month of July, 1861.....	18,956 82
Increase.....	\$6,021 44

The Toledo and Wabash Railway earned the second week of August:

	1862.	1861.
Passengers.....	\$5,461 18	\$3,244 45
Freight.....	31,893 71	24,481 22
Total.....	\$37,350 89	\$27,725 67
Increase.....		9,624 22

The second week of August on the Rock Island Road shows \$1,400 decrease.

The receipts on the Grand Trunk Railway for the week ending Aug. 9 were:

1862.....	\$60,013 17
1860.....	58,699 45
Increase.....	\$1,330 72

The business of the Boston and Maine Railroad for the year ending May, 1862, was as follows:

Cross revenue for the year ending May 31, 1862.....	\$ 732,427 64
Expenditures of every kind.....	442,021 11
Net earnings.....	\$290,403 50
Two dividends, 3 per cent. each.....	249,342 00
Undivided balance.....	\$41,064 50

The Toledo and Cleveland Railroad earned the second week in August:

Second week, 1862.....	\$17,759
Second week, 1861.....	11,435
Increase.....	\$6,324

The Galena and Chicago road earned the second week in August:

1861.....	\$26,831
1862.....	25,230
Decrease.....	\$1,601

The closing week of August will, as usual, show better.

The Michigan Central road earned the second week in August:

1861.....	\$24,120 00
1862.....	44,878 44
Increase.....	\$20,758 44
—Equal to 86 per cent.	

The Michigan Southern Railroad earned the first half of August:

1861.....	\$53,627
1862.....	89,954
Increase.....	\$36,327
—Equal to 67 per cent.	

The Housatonic Railroad Company has declared a dividend of four dollars per share on the Preferred stock of that company, payable on the 25th inst. The dividend on the stock on the New York books is payable at the office of Ketchum, Son & Co., Exchange Place.

The Pittsburgh, Fort Wayne and Chicago Railway Company give notice that the books of transfer have been opened at the agency in New York. Those having stock to register are requested to forward their certificates to the office or to the agents in New York, Messrs. Winslow, Lanier & Co.

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

Through Distance 280 Miles;

42 Miles Shorter than any other Route.

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M. 7:00 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without rebilling or transshipment.

JOHN BRANT, JR., Superintendent

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent.

33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON, STOCK BROKER, No. 21 West Third Street, CINCINNATI.

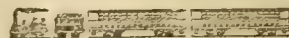
Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and takes collections.

KNOX & SHAIN, Engineering and Telegraphic INSTRUMENT MAKERS, 218 WALNUT ST., PHILADELPHIA. (Two Premiums by Franklin Institute.)

T. F. RANDOLPH & BRO. Mathematical Instrument Makers No. 67 West 6th St. bet Walnut & Vine CINCINNATI O

J. T. CRAPSEY, ATTORNEY AT LAW, OFFICE: N. W. Cor. Walnut & Sixth streets, my31 CINCINNATI

CHICAGO, GREAT WESTERN AND
NORTH-WESTERN LINE—INDIANA-
POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS.

CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:00 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:00 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—6:30 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.

W. H. L. NOBLE,

General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

BUSH & LOBDELL, Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,
MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

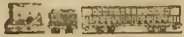
With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and one Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for

Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition

The well-earned reputation of this Road for **SPEED, SECURITY AND COMFORT** Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the recent *Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting **WASHINGTON CITY en route**—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

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Great Broad Gauge, Double Track
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CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

The **ONLY ROUTE** running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

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Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

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1866. CHARLES MINOT, Gen'l Sup't

W. MORRILL. G. B. BOWERS

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(Successors to and members of the late firm of

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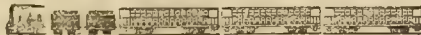
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Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

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IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
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THREE DAILY TRAINS FROM

PITTSBURGH TO PHILADELPHIA

(with close connections from Western Cities.)

ALL CONNECTING DIRECT TO NEW YORK,

**THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.**

FROM PITTSBURGH TO NEW YORK

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VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

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TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.

BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freight of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

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CLARKE & CO., Transfer Agents, Pittsburgh.

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Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the **PHILADELPHIA, NEW YORK and BALTIMORE MARKETS**. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

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UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:00 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton. RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day, Toledo & Day, Huntsville.....	5:20 P. M.	1:10 A. M.
Cin & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R. R

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	6:00 A. M.	11:10 P. M.
Indianapolis and Terre Haute.....	6:00 A. M.	1:13 P. M.
Decatur, Springfield & Quincy.....	11:30 A. M.	3:40 P. M.
Chicago Night Express.....	6:30 P. M.	16 00 A. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	5:00 A. M.	10:05 P. M.
Seymour Accommodation.....	2:00 P. M.	1:15 A. M.
Louisville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

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A. BRIDGES & CO.

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FINDINGS

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MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLAND STREET

NEW YORK.

ALBERT BRIDGES.

JOEL C. LANE

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.

Tube CLEANERS, Steel Wire and Whalebone BRUSH-

Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enamelled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warm-
ing Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Pia-
za Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.

Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,

28 Platt Street, New York

N. W. BALDWIN,

MATHEW BAIRD,

M. W. BALDWIN & CO. ENGINEER'S

BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those
interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for
which they may be required, by the use of one, two, three or
four pair of driving wheels; and the use of the whole, or
so much of the weight as may be desirable for adhesion;
and in accommodating them to the grades, curves, strength
of superstructure, and rail and work to be done. By these
means the maximum useful effect of the power is secured
with the least expense for attendance, cost of fuel, and re-
pairs to Road and Engine.

With these objects in view, and as the result of twenty-
six years' practical experience in the business by our senior
partner, we manufacture five different kinds of Engines,
and several classes or sizes of each kind. Particular atten-
tion paid to the strength of the machine in the plan and
workmanship of all the details. Our long experience and
opportunities of obtaining information enables us to offer
these engines with the assurance that in efficiency, econ-
omy and durability, they will compare favorably with those
of any other kind in use. We also furnish to order Wheels
Axles, Bowling or Low Moor Tire (to fit centers without bo-
ring), Composition Castings for Bearings; every description
of Copper, Sheet Iron and Boiler Work; and every article
pertaining to the repair or renewal of Locomotive En-
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419 y

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SUCCESSOR TO

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LOCOMOTIVE & RAILROAD CAR SPRING

MANUFACTURER,

WILMINGTON, : DELAWARE.

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WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

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We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being alike on
both sides, impossible to unravel, and leaving no chain or
ridge on the under side, the economy of thread, and adap-
tability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

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Corrugated Iron Roofs

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CORRUGATED SHEETS, OF ALL SIZES, constantly
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instructions for applying them. Give us your orders at
No. 66 West Third Street, Cincinnati, Ohio.
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MATHEMATICAL AND PHILOSOPHIC-
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Drawing Instruments, Scales of all kinds, Barometers,
Thermometers, Spectacles, Microscopes, etc., always on
hand. Repairing attended to.

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Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.,
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Engine and Car Axles, Pump and Piston Rods

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And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron
is conducted at our own Works June 9.

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LOCOMOTIVE WORKS,

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Continue to receive orders and to furnish with promptness
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COAL OR WOOD BURNING

LOCOMOTIVE ENGINES

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Railroad Machinery, Tires, etc.

-AND ALSO TO-

Rebuild and Repair Locomotives.

The above works being located on the New York Central
Railroad, near the center of the State, possess superior
facilities for forwarding their work to any part of the coun-
try, without delay.

JOHN ELLIS, President.

WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

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MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boil-
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to definite lengths.

Wrought Iron Welded Tubes—from ½ inch to
8 inches inside diameter, with screw and socket connec-
tions, for Steam, Gas, Water, or other purposes, and fit-
tings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong
and durable, designed especial for Water purposes.

Cast Iron Gas or Water Pipe—¼ to 24 inch
diameter, and branches for same. &c.,

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EXCELSIOR FLUID INKS!

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JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

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In use by 10,000 Merchants, Bankers and Railroad offices
for the South and West. For sale by 1,000 leading Station-
ers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, SEPTEMBER 11, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

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If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

In consequence of the intense excitement in our city last week, and the necessity for all citizens to aid in the defense of Cincinnati, we were unable to get out our regular issue. This, we presume, will be a sufficient apology to all our patriotic readers.

OUR MONETARY AND COMMERCIAL.—Cincinnati being under martial law, and, in the main, business entirely prohibited, we deem it a work of supererogation to give any remarks relative to either Monetary or Commercial affairs.

FREMONT, LIMA AND UNION R. R.—This company was organized after the sale of the Fremont and Indiana Railroad in December by order of court. The new company purchased all the rights and property of the old company. The capital stock of the new company is \$1,500,000, of which only \$500,000 has so far been issued. The amount of the first mortgage bonds is \$500,000. The company has no other debts or liabilities. The length of road built and in operation is 37 miles. It will thus be seen that the road is charged with a total liability in stock and bonds of a little less than \$30,000 per mile of road.

UNION PACIFIC RAILROAD.

MEETING OF THE COMMISSIONERS.

The most important railroad meeting ever held on this continent, was held at Chicago during the past week. The Commissioners under the Pacific Railroad Act of last Congress, assembled according to notice on Tuesday Sept. 2, at 12 o'clock M., at Bryan Hall. The meeting was called to order by Wm. B. Ogden, Esq., of Illinois, who nominated Gen. S. R. Curtis, of Iowa, as temporary Chairman. The vote being taken, Gen. Curtis was unanimously elected, and on assuming the chair briefly addressed the convention as follows:

Gentlemen Commissioners of the Pacific Railroad:

You have been selected by the Congress of the United States to perform a serious, solemn, and important national duty. It is to organize a Board of Commissioners for the construction of a railroad connecting the waters of the Atlantic and the Pacific Oceans. Many have labored in behalf of this object for twenty years, and, as an humble member, he had constantly looked to the passage of a bill by Congress, and the assembling of Commissioners, as a certain means of final success. The bringing of the matter to some practical point has always been a something in the way of success. The politicians of the country, and all the railroad men have looked upon the idea of connecting these waters by a railroad and a telegraph as sure to be accomplished. The progress of railroads and railroad enterprise has shortened the distance, until now it is only necessary to construct from sixteen to eighteen hundred miles of road to form a connection with these waters; a less number of miles than was built in this State in two years only. The enterprise is simplified, so far as the construction is concerned, by the passage of a bill authorizing the building of but one main trunk; while, heretofore, it has been necessary to comprehend three or four lines.

He had only a temporary position as an officer of this body; it was all he could ask, and it satisfied him. He had devoted a great deal of time, and had labored assiduously, in this cause; he had attended every railroad convention known to him, in Illinois, Indiana, Iowa, and other places, and was now in attendance upon this convention. We have already overcome a great many obstacles, and the matter is finally brought down to a system. As temporary Chairman, it would be his purpose only to state such motions as might be presented for consideration.

The permanent organization was a matter of vast importance, and he hoped the organization might be a success, and that men would be selected with a view to the good of the common cause. For himself he declined, unconditionally any official position in the permanent organization.

We of the West have but a single object in view, in the construction of a Pacific Railroad. We regard it as an absolute necessity. We are situated as a kind of half-way house. He had but little to say. The bill that has been passed by Congress is more liberal than the one he drew up and offered to Congress for its passage, though much like it. For years he had conversed with railroad men, high and low, rich and poor, and was certain most of the railroad men of the country would agree

with him that support will be given to this bill, not merely for the sake of gain, but for reason that the men interested in the enterprise will secure a more enduring fame than that of any other class of men on this continent. (Applause.) The thing is practicable, and it deserves the careful consideration of men in both America and Europe.

Although these times seem unpropitious for the prosecution of the Pacific Railroad, the elements of income are just as strong now as ever before. The postal service between here and California is one source of revenue, and another source of income is the travel to California and back. The prosecution of the work may be impeded because of this war, but not materially. The war may rage, and the people be in ever so great confusion, still the necessity of the railroad is just as great as before the war began. As a war engine, the necessity for this railroad is greater now, because we have got such a passion for military movements.

This railroad runs through the Mormon settlements; you can't go around it; and they will assist in its construction. That of itself is of great importance. The western gold mines are being worked steadily; they do not seem to lose any vigor by the prosecution of war; California is comparatively in peace, and, in fact, all the elements of income are still inviting the prosecution of this great work.

The success of this railroad, as a work of profit and a great element of use in this nation is clearly deserving your energies.

He congratulated the Commissioners upon the enviable position they occupied, and hoped they would assist him in preserving order and promoting harmony in the assembly.

Mr. Geo. W. Cass, of Pennsylvania, moved that Mr. Robert Finney, of Penn., be elected temporary Secretary. Pending which motion Mr. James T. Ryan, of California, moved that Mr. John R. Robinson, of California, be elected temporary Secretary. Before the motion was put to vote, the delegates present were invited to take seats upon the platform, that they might be better enabled to hear and take part in the proceedings, and that those entitled to vote might be more readily distinguished. The delegates having taken their seats upon the platform, it was moved that both the gentlemen nominated be elected temporary Secretaries. Carried. It was then moved that the roll of the Commissioners be called. Pending which, on motion a Sergeant-at-Arms was appointed. The roll was then called and the following gentlemen answered to their names:

Maine—Jas. Dunning, John M. Wood, Jos. Eaton.

New Hampshire—Joseph A. Gilmore.

Massachusetts—Edward R. Tinker.

Rhode Island—Charles Fosdick Fletcher.

Connecticut—Cornelius S. Bushnell.

New Jersey—Ephraim Marsh, Charles M. Harker.

New York—Royal Phelps, Wm. H. Ferry, Samuel R. Campbell, Alfred E. Tilton, Azariah Boody, John S. Kennedy, H. Carver, Joseph Field, Benj. F. Camp, Orville W. Childs, D. N. Barney, S. DeWitt Bloodgood, Thomas W. Olcott, Samuel B. Ruggles, James B. Wilson.

Pennsylvania—Joseph H. Scranton, George W. Cass, Robert Finney, John A. Green, E. R. Myre.

Ohio—Amasa Stone, Wm. Dennison.

Indiana—Charles Paine, Samuel Hanna, Jonas Votaw, Jesse L. Williams, Isaac C. Elston.

Illinois—Wm. B. Ogden, Charles G. Hammond, Henry Farnum.

Michigan—John D. Campbell, Charles A. Trowbridge, Ransom Gardner, Charles T. Gorham, Wm. McConnell.

Wisconsin—John Catlin, Levi Sterling, Geo. Thompson, Elihu L. Phillips.

Minnesota—David Blakely.

Iowa—William F. Coolbaugh, Lucius H. Langworthy, Hoyt Sherman, Lyman Cook, Samuel R. Curtis, Lewis A. Thomas, Platt Smith.

Missouri—Wm. M. McPherson, Armstrong Beatty, John Corby.

Kansas—J. C. Stone, Werter R. Davis, Josiah Miller.

Nebraska—Gilbert C. Monell, Augustus Kountz, T. M. Marquette, Alvin Saunders.

Colorado—John Evans.

California—James T. Ryan, D. O. Mills, John R. Robinson.

Appointed by the Secretary of the Interior—Samuel J. Tilden, of New York; H. V. Poor, of New York; R. W. Latham, of the District of Columbia; O. M. Wozencraft, of California.

It was moved that Ed. V. Hood, of Milwaukee, be admitted to a seat in the Convention, in place of E. H. Brodhead, of Wisconsin, detained at home by sickness. A letter was read from Mr. Gorin, of Kentucky, who desired Mr. J. J. Rogers to act as his substitute. Mr. Benj. F. Camp, of New York, read a clause in the bill empowering the convention to add to its numbers by the appointment of not more than two additional members. The Chair ruled that the motion was out of order. A letter was also read from Mr. L. Bull, of Illinois, appointing a substitute. It was decided that substitutes could not be admitted. It was moved that a committee be appointed to nominate permanent officers. It was moved by Mr. Gilmore, of New Hampshire, to amend the motion that a committee of one be appointed from each State, and that the chairman be from the State of Illinois. The amendment was opposed by Mr. Cass, of Pennsylvania; Mr. Coolbaugh, of Iowa, supported the amendment. It was then suggested that nominations be made and remain before convention till to-morrow at 10 o'clock. Mr. Marsh, of New Jersey, proposed that the vote be taken this afternoon. Mr. Cass accepted the amendment last proposed.

Mr. Bloodgood, of New York, moved that when we do adjourn, we adjourn till 5 this P. M. Mr. Gilmore, of New Hampshire, insisted an adjournment till to-morrow at 10 A. M. The Chair understood the question to be that the convention now proceed to make nominations for permanent officers. Gov. Dennison, of Ohio, asked if nominations were now made, would it preclude nominations to-morrow. The Chair answered in the negative. Judge Marsh, of New Jersey, arose to say that he understood this to be unparliamentary. The Chair decided that under the motion now made, the time for making nominations extended till the commencement of taking the ballot. Gov. Dennison, of Ohio, asked then why should nomina-

tions be made at all. Members could discuss this without constituting the convention into a caucus. He would recommend that the convention proceed to dispose of any other business, and then adjourn. Mr. G. C. Monell, of Nebraska, then moved that when we do adjourn we adjourn till to-morrow morning at 10 o'clock for the purpose of perfecting a permanent organization. Mr. Scranton, of Penn., thought it unnecessary to adjourn to so late an hour as to-morrow, but suggested that the convention adjourn till this P. M., at 5 o'clock. Question was taken on motion to adjourn till 10 A. M., to-morrow—ayes 31, noes 39. Question was taken on the motion that when we adjourn we adjourn to 5 P. M. Before the vote was taken, Mr. Gilmore renewed his motion that a committee of one from each State be appointed to nominate permanent officers. Judge Marsh arose to question the policy of making nominations by committee. His experience was that it was easier to call the States, and each State make one nomination, and consultation could then be had, and the convention have all the prominent candidates before them. He hoped the motion of the gentleman from Penn. would prevail, with the suggestion he made. Mr. S. B. Ruggles, of New York, should claim the right to vote for any gentleman, whether nominated or not. Mr. Ryan, of California, stated that if a rule was adopted to close nominations to-day, he would vote for the motion. Mr. Hanna, of Indiana, sustained the ruling of the Chair that nominations be open till the convention begins to ballot, and hoped the motion would prevail.

Mr. McPherson, of Missouri, then moved that the convention adjourn till 5 P. M., this day. The motion was carried, and the convention adjourned to meet at 5 P. M.

FIRST DAY—AFTERNOON SESSION.

5. P. M.—It was moved by Mr. Cass, of Pennsylvania, that the commissioners now proceed to the election of permanent officers for the convention, and that nominations be made for President. Carried. Mr. Cass, of Pennsylvania, nominated Wm. B. Ogden, of Illinois, for President. Mr. Scranton, of Pa., nominated Geo. W. Cass, of Penn. Mr. Cass declined the nomination. The question was then put, and Mr. Ogden was elected by unanimous vote. The Chair appointed Mr. Cass, of Pennsylvania, and Mr. McPherson, of Mo., to conduct Mr. Ogden to the chair. On assuming the chair, Mr. Ogden briefly acknowledged the honor conferred on him in making him President of the permanent organization of the commissioners, and expressed his intention of doing his best for the development of the great project in view. Mr. Ogden expressed his conviction that the bill as passed was still crude, and needed some serious amendments. We will endeavor to give Mr. Ogden's remarks in a subsequent issue.

Mr. McPherson of Missouri moved that Henry V. Poor, of New York be elected perma-

nent Secretary. Mr. Gilmore, of Pennsylvania, arose to say that he was unprepared to proceed to further organization and he moved that we now adjourn till tomorrow morning at 10 o'clock. Mr. McPherson then insisted upon immediate organization and Mr. Gilmore urged the motion to adjourn. The question to adjourn was put and lost. Mr. Ferry then arose and nominated Mr. Benjamin F. Camp of New York as permanent Secretary. Mr. Ryan of California then arose and moved that a committee on the balance of the organization and one on resolutions be appointed, and suggested that the meeting should then adjourn till to-morrow morning at 10 o'clock. A question of order was raised. And Mr. Ryan moved as an amendment to refer the nominations of secretary to a committee. Mr. Gilmore moved to nominate Mr. John R. Robinson of California. Mr. Cass of Pennsylvania opposed the reference to a committee. Mr. Hammond of Illinois opposed reference to committee and proposed to ballot for the officers. Mr. Gilmore thought this a very important matter. He had proposed this morning a committee of one from each state on organization. This should be no clique—time should be taken—other commissioners would be here on the cars to-night and he was in favor of taking time. Mr. Tilden of New York said he should vote against the reference to a committee, with intention to move that we go into an election by ballot. The motion to refer to a committee was lost. Mr. Tilden then moved that we proceed to elect a Secretary by ballot. Mr. Ryan then said he should oppose the election by ballot and believed that this Convention should vote openly. Mr. Tilden then accepted the amendment and the amended motion was adopted. Gen. S. R. Curtis then moved that the convention now adjourn till to-morrow morning at 10 o'clock. A point of order was raised. During the discussion of which Mr. Ryan asked Gen. Curtis to withdraw his motion that he might move the adoption of Jefferson's Manual as the rule of order in the proceedings of the convention. Mr. Bushnell, of Connecticut, thought the convention would save a day's time by appointing a committee to bring forward the business of the convention. He said: Myself, and perhaps many others, are not fully posted on the provisions of this bill, and a committee would help us to understand things that now we do not understand. Gen. Curtis then arose, and in discussion explained some of the questions raised by Mr. Ogden in his address.

Gen. Curtis said: In the discussion of this question of rules, I think the few remarks I now offer will be applicable. I intend to traverse the same points as our President, on the ground that the subjects were brought on irregularly, and that it is not wise, at present, to ask further aid from Congress. One of our speakers said "The moment you get a charter, you will be coming back and asking for something more." Now, in asking Con-

gress to help us let us ask only for what we want, and when we need it. The first amendment proposed by the President is in reference to right of way. It was considered by him that Congress had no right to take private property for public uses, and the charter you will have to apply for will contain these provisions. There will be no difficulty of securing this right of way, because every state through which the road passes will be glad to have the road, and therefore to give the charter, and all these charters contain a power which enables the company to take land for public use.

The second amendment relates to the power of mortgage. The same argument relates to that. There is no need to go to Congress for anything in reference to it. It was objected to on the ground that Congress could not give an order that would be binding upon the State, and upon the courts of the State. But you can not, in a State or territory, procure a mortgage which will take precedence of that which has been given originally by Congress. That removes another necessity of going to Congress.

Another point was in regard to the time required for the completion of the road. If we have not got time enough, and fail to accomplish the work within the specified period, we may always depend upon the needful extension.

Twenty five per cent is withheld by Congress of the advance upon the bonds for the first one hundred and fifty miles. The donation of Congress toward the first one hundred and fifty miles at each end is 6,400 acres of land and \$12,000 in bonds per mile. Now, where does this one hundred and fifty miles at each end of the line lie? One is on the Sacramento River and the other is on the Missouri; not out of the world—not in positions where it is valueless. That land is worth half a dollar an acre at the lowest estimate; in fact the 6,400 acres are worth in cash not less than \$4,000. The cost of construction at these two ends of the line is small, for, from the natural peculiarities of the country, it is about one of the easiest roads in the United States. Is not, then, the \$16,000 per mile enough to begin with? And, when it is exhausted, you can ask Congress for more. You have money enough given to you by Congress to actually make the road, or very near it. In the Far West, those who are troubled with very little means to make roads have yet got along without Congressional aid, and have carried roads on, in hard times and under adverse circumstances, without these donations. I mention this with some degree of apprehension that, notwithstanding the grant is liberal, it may still be insufficient; but I hope that it is not so and, at all events, I would not, for three or four years, apply for more. With my own experience of railroads, I could not have asked so much as Congress has given. Let us have the \$12,000 and the 6,400 acres of land, and if after we have tried, we find it necessary to have the 25 per cent, why, then, let us ask for it.

There is a first mortgage given to the United States for these thirty years' bonds. Instead of borrowing money from private persons, you go to Congress for it. There is no danger in this course; no railroad bank has anything to do with it. The first mortgage bonds are the chief cause of our success in getting this bill through Congress; without that, we could not have passed it, and I do hope that we shall be enabled to construct the road without asking for more. Then there is 7½ per cent to the stockholders.

Mr. Trowbridge arose to say he was much interested in Gen. Curtis' remarks, but he believed the question before the convention was shall we adopt Jefferson's Manual. Gen. Curtis said he would come to that in a few moments.

I have spoken before only of the first one hundred and fifty miles; when you come to the Rocky Mountains, where the difficulties of construction are greater, you have three times the amount allowed, \$48,000, and the same amount of land. The cost of material and of rolling stock is the same as here, except the cost of transport, and that you carry with you by the construction of the road.

When you get these things, it seems to me it is not necessary to get a conditional subscription. I know that any effort to immediately call upon Congress for further lands or further advances would only give rise to prejudices against the road.

I ask pardon for intruding these remarks before speaking as to Jefferson's Manual. I think it is not needed, and that we are sufficiently acquainted with Parliamentary proceedings to guide ourselves without it.

Mr. Ryan withdrew his motion and adopted the suggestion that the common rules, which govern parliamentary bodies, be adopted. It was then moved that all members of Congress, who may be present, be invited to take seats on the platform. Carried.

Mr. Bushnell of Connecticut moved that a committee of thirteen be appointed to prepare business for the convention. Gen. Curtis then arose and renewed the motion to adjourn to 10 o'clock to-morrow morning. Question put and division called for, Ayes 28, Noes 30. Motion to adjourn lost. Question now recurring on the motion to vote *viva voce* for Secretary. Carried.

The Secretary then called the roll and it was found that 51 members voted for Henry V. Poor, of New York, 10 members voted for Benj. F. Camp, of New York, and 6 members for John R. Robinson, of California.

It was then moved that Mr. Poor be declared unanimously elected Secretary. Carried.

Mr. Bushnell, of Connecticut, renewed his motion that a committee of 13 be appointed to present business to the convention at its meeting to-morrow morning. Gov. Dennison of Ohio, preferred to perfect the organization first, and moved that the convention proceed to the election of Treasurer. Carried.

Mr. Hammond nominated Thomas W. Olcott, of Albany, N. Y. Gen. Curtis arose and nominated Geo. W. Cass, of Pennsylvania—Mr. Cass declined. Gov. Dennison, of Ohio, moved that the nomination of Mr. Olcott be unanimous. Carried. Mr. Bushnell renewed his motion to appoint a committee of 13 to present business to the convention to-morrow morning at 10 o'clock. On motion the committee was made one from each State and territory represented. Accepted. On motion of Mr. Wozencraft, of California, one from the Commissioners appointed by the Secretary of the Interior, was added. Gov. Dennison deemed so large a committee unnecessary. He thought a committee of five well distributed

over the country would be better, and made a motion to that effect. Mr. Bushnell thought a small committee most effective, but some States not represented in the organization ought to be represented. He moved the large committee should be appointed as by the previous motion, and that this committee should appoint a sub-committee of three to digest the business for the large committee. Gov. Dennison withdrew his motion. Mr. Bushnell's motion was carried. The following committee was nominated by the various delegations:

John M. Wood, of Maine; Chas. W. Woodman, New Hampshire; Edward R. Tinker, Massachusetts; Chas. Fosdick Fletcher, Rhode Island; Cornelius S. Bushnell, Connecticut; Ephraim Marsh, New Jersey; Samuel B. Ruggles, New York; Geo. W. Cass, Pennsylvania, Amasa Stone, Ohio, Samuel Hanna, Indiana, Wm. B. Ogden, Illinois; Charles T. Gorham, Michigan; John Catlin, Wisconsin; David Blakely, Minnesota; William F. Coolbaugh, Iowa, John Corby, Missouri; J. C. Stone, Kansas; Alvin Saunders, Nebraska; John Evans, Colorado; D. O. Mills, California; Samuel J. Tilden, from the Commissioners appointed by the Secretary of the Interior.

The President, Wm. B. Ogden, extended an invitation to the members of the convention and those present to attend its session, to visit him at his house this evening. On motion, the convention then adjourned till to-morrow morning at 10 o'clock.

SECOND DAY'S PROCEEDINGS.

Convention assembled at 10 o'clock A. M. Called to order by the President, Wm. B. Ogden, who stated that the committee was not yet prepared to report, but thought it would perhaps please the convention best to be called to order. He had understood that some of his remarks had been misunderstood, that he would take the opportunity of writing out his remarks. The roll was then called. During which the President stated that Mr. John H. Bryant, printed in the roll as of Pennsylvania, was present in the convention but was a resident of Illinois. That he was the gentleman intended in the Bill and asked the pleasure of the convention. On motion of Mr. Bushnell, of Connecticut, it was resolved that the Mr. Bryant referred to, be and is hereby considered a member of this convention. The minutes of the first day's proceedings were then read and approved. The Chair then read to the convention an invitation from Mr. Preston, Superintendent of the Illinois and Michigan Canal, to visit the Hydraulic Works of that company at Bridgeport. Mr. Ruggles of New York moved that the invitation be accepted. Carried. The Chair then announced that he had received an official communication from the Territory of Colorado addressed to the President and the Board of Corporators of the Union Pacific Railroad and Telegraph Company,—certified with the

Territorial seal and the signature of the Secretary of the Territory,—on the subject of the Pacific Railroad.

On motion of Samuel B. Ruggles, of New York, the letter was read and then laid upon the table.

It was as follows:

JOINT RESOLUTION.—Relating to the Union Pacific Railroad and Telegraph Co.

Whereas, The Territory of Colorado, situate intermediate between the Atlantic and Pacific States, has a deep interest in the great enterprise to connect them by railroad; and

Whereas, We believe that, as such intermediate settlement, her hearty co-operation in the establishment of such railroad is of great importance to all parties concerned; therefore,

Resolved, by the Council and House of Representatives of Colorado Territory:

1st, That we pledge to the Union Pacific Railroad and Telegraph Company the earnest aid of the people of Colorado in the great national enterprise they have undertaken.

Resolved, 2d, That we ask said company to locate said railroad through our Territory, believing it to be the best and most practicable route for the same.

Resolved, 3d, That we recommend said company to select at least one of its Board of Directors from Colorado Territory.

Resolved, 4th, That we commend his Excellency Governor Evans as a suitable person for such Director, and request him to attend the meeting of the Board of Corporators to be held in Chicago, on the 2d of September next, to represent the interests and claims of the Territory of Colorado.

Resolved, 5th, That a copy of this preamble and resolutions be furnished his Excellency, Gov. Evans, and one forwarded to said meeting of the corporators at Chicago.

I, Samuel H. Elbert, Secretary of Colorado Territory, hereby certify that the foregoing is a true and correct copy of a joint resolution now on file in my office.

In testimony whereof, I have hereunto set my hand and caused the great seal of the Territory to be affixed. Done at Denver, this fifteenth day of August, A. D. one thousand eight hundred and sixty-two.

[SEAL.]

SAM'L H. ELBERT,

Secretary of Colorado Territory.

Committee appointed yesterday to prepare business for the consideration of the meeting, by their Chairman, Mr. S. B. Ruggles, of New York, made the following report:

The Commissioners of the Union Pacific Railroad Company, incorporated by act of Congress, approved July 1st, 1862, assembled at Chicago, in conformity with said act, on the 2d of September, 1862, deem it proper and necessary to declare the motives which have influenced them to accept the trust committed to them by the act, and the public considerations by which, in their judgment, those who direct the affairs of the company should be exclusively guided. They do therefore,

Resolve, 1. That the speedy completion, through the territory of the United States, from the Atlantic to the Pacific, of a railway communication affording adequate means of transit for persons and property, and especially for the mails and military forces of the government, has become a matter of urgent public necessity, not only in facilitating and augmenting the commerce and developing the agricultural, mineral, and fiscal resources of our Continental Union, but permanently in providing for the public defense and perpetu-

ating the political unity of the Atlantic and Pacific portions of the Republic.

2. That the eastern division of this great continental chain, extending from the Atlantic ocean to the Mississippi river, having been already completed by the capital and enterprise of companies incorporated by the several States, it was eminently proper for the United States to incorporate a national company for completing the residue, reaching from the Missouri to the Pacific, with such aid from the national treasury resources as seemed to be necessary, and that the country may well rely on the continuance of the same wise and paternal policy to expedite the efforts of the company to complete the work with all practicable dispatch.

3. That it was peculiarly the duty of the nation, which has assumed and exercised the right greatly to extend its original limits by annexing the broad continental area between the Mississippi and the Pacific, and that, too, for the avowed purpose of protecting the commerce and territory of the Union from foreign interference, to exert all its powers to secure the completion of a chain of communication so vitally important to both.

4. That the denationalizing and treasonable effort now in progress to separate the slaveholding portion of the Union from the residue, could it be successful, would inevitably be followed by attempts still more flagitious, not only to detach the States on the Pacific, but even to separate the States on the Lakes and the Upper Mississippi and the Missouri from those on the Atlantic, and possibly from each other; that this audacious and abominable attempt to demolish the fabric of our national government is secretly encouraged, if not openly approved, by at least a portion of the European world; and that the American people are now impelled, by every motive of interest, duty, pride and honor, and every interest of self-respect and self-preservation, to avert from themselves and their posterity a calamity so enormous.

5. That this peculiar character of the pending rebellion, involving, if successful, the utter destruction of our national organization, and the consequent reduction of our hitherto powerful republic to the feeble condition of Central Europe, entailing on our continent for centuries to come, perpetual internal strife, if not interminable war, imperatively requires not only the utmost exertion of the military and naval power of the government, but the immediate adoption of every measure of civil administration for strengthening the bonds of our existing Union, and that nothing will contribute more permanently and effectually to that object than the binding without delay, by an adequate chain of communication, of the Pacific coast and the rich metalliferous regions of the interior to the large and powerful group of food producing States around the lakes and the maritime States on the Atlantic seaboard; and that such a channel of inter-oceanic intercourse through the central portion of the continent, occupied by a populous and homogeneous race, enjoying easy and daily access to the two oceans of the globe, would enable it not only to resist and defy any further attempt, either at home or abroad, to dismember our territory, but to exercise a commanding influence over the commerce, if not the political destinies of the civilized world.

6. That Congress has acquired a new claim to the gratitude of the people by delegating to an incorporated company the duty and responsibility of constructing and managing this great work of national improvement, and in aiding it by the public credit and grants of the public lands; that, through this instrumental-

ity, the enterprise will enjoy the benefit of a permanent and steady direction, exempt from the uncertainty and delay of yearly appropriations, and especially from the vicissitudes of party conflicts and the demoralizing effects of party interference, permitting its Directors to carry forward the work with activity, intelligence, and honesty, on a continuous and systematic plan, undisturbed by any changes or vascillations in our public counsels, or any fluctuations in our public affairs.

7. That the Commissioners are profoundly impressed with the conviction that under the pressing exigency of our present struggle for national existence, this great channel of intercourse, with its rich and invigorating streams of national commerce and unrivaled military facilities, is more than ever needed to preserve the American Union from political dissolution; that the pressure of the pending war, so far from affording any reason for delaying its prosecution, shows only more its urgent necessity; that no time should be lost in securing its speedy completion by every reasonable effort; and that, in a crisis so grave as the present, the company and the country may properly and confidently rely on the government promptly to afford to the work any further aid or facility which the vital interests involved in its rigorous prosecution so evidently require.

The reading of the resolutions 4, 5, and 7 was received with applause.

At the conclusion, Mr. Ruggles stated that the committee had not quite finished their labors, and would desire to do so in the next interval.

Dr. Wozencraft, of California, suggested that in addition to the points already named, books of subscription be opened at Salt Lake City, and moved to that effect. Gen. Curtis arose to a point of order, and moved the acceptance of the report, with leave to the committee to sit again. Carried. Dr. Wozencraft then called up his resolution. Gov. Dennison, of Ohio, moved that the Report be now taken up and the resolutions considered in order. On motion, Gen. Hill, Surveyor General of Dacotah, was invited to a seat on the platform. Mr. Ruggles then read the preamble of the Report and first resolution. Dr. Wozencraft, of California, moved that the first resolution be adopted. The Chair then stated that as gentlemen had various views on this question, it was desirable that gentlemen express their views now. Mr. Ruggles, of New York, said: "I would call special attention to the importance of the development of the mineral wealth of the regions through which the proposed railroad is to pass; but we all understand, without explanation, the value of this. We also understand the progress of States and the development of the populations of those States. To see a dozen States formed is very good, and I see no cause why we should not have a dozen more. But the mineral resources of the country are the things on which we should rely. This is, perhaps, not so self-evident. I see, however, a gentleman present who is well acquainted with the subject, the gentleman from Colorado, and I want to hear what he says about it. When he has told us of the vast mineral wealth of the country, and shown us

the enormous amount of gold and silver in the mountains, we may venture to form a slight estimate as to the value of these in connection with the fiscal affairs of this country."

Gov. Evans, in response, replied as follows:

Mr. President and Gentlemen of the Convention:—I am unexpectedly called upon at this moment, although I had supposed that, during the convention, an occasion might offer for me to present some very interesting facts, with which I have become acquainted, during a short residence in the Rocky Mountains. But, unprepared as I am,—I had hoped to be better prepared before being called out—I will give you a brief account of what we are doing in Colorado. I am happy to say there are gentlemen present, who are more conversant with the resources of the west of it than I am myself.

Two years ago there was an immense rush of emigration to the Rocky Mountains. A large portion of those emigrants went without capital, and consequently a large proportion made a failure in their object, which was to seek a rapid accumulation of wealth. But that interest and that rush, carried there under the impression that gold was so abundant that it might be ground off the stones in unlimited quantity, brought into the country a large number of quartz mills, which were excellent machinery. A year after they became almost worthless, so that these mills were considered as dead property on the hands of their owners. The ordinary quartz, of which you have heard so much, produced well at the surface, but as it went down, it seemed to give way to "fools' gold," or pyrites of iron. The miners' hopes vanished as this made its appearance, and hence quartz mills declined in value. But during last autumn and winter, it was found out that this iron or "fools' gold" was richer than any ever discovered in any other parts of the world [applause], and that the fools were fooled a second time by "fools' gold." [Laughter.]

As they penetrate the earth, these quartz leads, which are almost unlimited in number, become richer. There is a region called Gregory Diggings, a small section of our mountains, extending about thirty miles along the Snowy Range, by about ten miles in width, where the quartz lodes, as they call them, are about 100 feet apart, and wherever have been penetrated to the depth of 100 feet or more, all of them producing this rich, gold-bearing iron. As they go down this gold is found with a degree of uniformity that would induce investment by any capitalist. It becomes richer and richer in gold, so that the idea suggested by my predecessor in the governorship of Colorado, that below would be found gold in mass and position, would seem to be favored by the experience of the miners thus far at any rate. As they go down, they find it pays better and better in every single shaft of which I can gather any knowledge or information.

In the region of Central City there are within the space of two miles about 100 of these mills in operation; and of all places, not excepting the crowded thoroughfare of Chicago, there is no place where I find such uniform confidence and satisfaction at the manner in which business is going on as in that region, where there are about 10,000 prosperous and successful business men. These quartz mills are said to be, with scarcely an exception, paying well at this time, and some of them producing gold in such abundance as to astonish almost any one. Men with little mills, costing but \$3,000 in Chicago, will get out, week after week, a clear profit of \$1,500 in gold. Other men, who have

larger establishments, are doing still better; and I do not know any place on the continent where there are a like number of men more prosperous than in that region. The chances for others to come in and do likewise are abundant, as I have indicated by the extent of the region mentioned; and I want you to bear in mind that this is but a small part of the gold region.

We have a region that is called the Buckskin Joe region, where we have this same kind of ore, and the lodes are from six to forty feet in width, giving ample room for the miners to work, while in the Gregory diggings they are but from two to six feet in width. This region is about one hundred and fifty miles along the snowy range, by five to ten miles wide.

I will not detain the convention with further details, but I would say, as to the amount of gold likely to be got out, that I had a gentleman of undoubted veracity to go through all the quartz mills and inquire about this item in the little region of Gregory, and he estimated carefully by figures, so as to find out how much they were getting out weekly. His estimate was at that time, which was in June, that they were getting out \$95,000 a week within a space of two miles around Central City. This would amount to nearly five millions per annum, and he says that each week produces a larger yield than the week before, so he had no doubt it would rapidly extend to double that amount. Now, I want you to bear in mind that this is a very small part of the whole. The yield, I suppose, will be twice as much in the whole Territory. It is a general estimate that the yield for the present year will be at least double that of last year—many say triple.

These facts, substantially as I have stated them, I published in my message to the Legislature. Upon inquiry of mining men of intelligence as to the safety of my statements,—whether I had over-stated anything—I found not a single voice but united in the proposition that I had under-stated the thing. "There are some facts so good it won't do to tell them entirely [laughter], and we have some of that kind in Colorado."

Now, sir, as I was called upon to dwell exclusively upon the mineral prospects, I will say that there is room for unlimited investment of capital upon a certainty of paying well in that Gregory region alone, saying nothing of regions much more extensive.

The route which I suppose this Pacific Railroad will undoubtedly pursue is right through this Gregory gold region. Once get over the Snowy Range by this route, and you have overcome the great obstacle which is in the way of getting through the South Pass and all other passes. Although we go a little higher, yet we go down again immediately to a lower valley, and keep in it clear through to Salt Lake. After passing the Snowy Range, the remaining portion of the route is vastly superior to any other. This valley is fertile, heavily timbered, well watered, and has coal in abundance along the line between the Snowy Range and Salt Lake City.

As I was going to say, the line goes directly through this paying mining region, where there is room for 500,000 inhabitants to employ themselves to-day, if facilities for their support were given by this Pacific Railroad. As you go by the Platte or Republican River, either of which will make a good route, you will see almost a perfect dead level, without obstructions, and at any time you can lay down the ties for 600 miles quicker than it was done on the Michigan Southern or Rock Island roads. [Applause.] General Lander—and I call up his memory before you with deference—offered, a

few years ago (and he surveyed the road from Puget's Sound to the Missouri River), to build that portion of the road up the Platte river for \$5,000 per mile. Most of you are railroad men, and I tell you you can build that road almost all the way without the use of the spade. It is such a natural road for a highway as never has been found in any other country on the face of the earth. You want to put your interests together as quickly as possible, and build it to the Rocky Mountains, and you have got the whole commerce between here and there, which is now immense, and which will be doubled, as well as the travel to California, Utah and Colorado.

Mr. Evans called the attention of the commissioners to a map upon which was traced a route requiring a tunnel for the railroad running directly through the gold bearing region. The surveys were certified to by the Surveyor-General of Colorado and Utah—in every way a reliable man. The tunnel would be three and a half miles in length, yet he thought that by a more careful exploration, the distance would be diminished.

I mentioned that the mines are richer here than are found anywhere else; but I might make an exception of the silver ore in the Comstock lead. With that exception we can challenge the world as to the richness of our gold. The richer veins of this ore produce \$500 to the ton by the ordinary process. Then it has been discovered recently, and some men got rich in a day by it, that, when ground up, a chemical process takes place after lying exposed to the air and water, which produces such a change in the ingredients that, by grinding it over again, they get a large amount of the precious metal. These statements were made without counting in this subsequent grinding.

I intended to have stated that this Gregory region extends up to this proposed tunnel, and they all say that the mountain there is of the same formation. They are working mines within three or four miles of that, and without doubt the tunnel would run through veins equally as rich. The rock is not like your eastern granite, but is coursed by veins all through, and is readily torn down.

At the base of the mountains, near Denver City, we have discovered large bodies of bituminous coal, which is used for fuel, and by the blacksmiths for their work. This coal is found along the base of the Rocky mountains in nearly the whole extent of the Territory, running in veins of from three to five feet thick, and is easily worked. Upon the line of the Territory, between Colorado and Utah, on this route to which I have directed your attention, have been found some of the best coal mines ever discovered. I have at my office some beautiful specimens of this coal, equal to anything you have in Illinois.

Now, as to iron, I have with my specimens a beautiful piece of cast-iron, made in Denver City from ore picked up near one of these coal banks, lying near where this railroad line is run. On the 107th parallel, west longitude, you will find these coal beds in large quantities.

The valley between Denver and Salt Lake City is destined to be settled very soon. It is fertile, has an excellent quality of fine timber in abundance, is well watered with good streams of good water, and, as soon as a wagon road is built, for which a small appropriation has already been made. I have no doubt it will be settled at once.

These are briefly some of the more important points, as they occur to me, concerning

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Fanded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	R te of Int.	Quotation of Bond.	Duo.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa. Md.	64	48	\$ 13,111,800	\$ 10,781,833	\$ 566,07	\$ 3,922,203	\$ 2,305,788	Sept. 30, 1860	Maryland Sterling.	3,000,000	5			
Baltimore and Ohio.....										Mortgage.....	2,500,000	6	95	1885	
do do										"	700,000	6	84	1880	
do do										"	1,124,500	6	90	1875	
do do										"	1,000,000	6		1867	
do Washington Branch.....	Md.	30		1,650,000						1st Mortgage.....	791,000	7	55	1865	
Bellefontaine and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	139,125	314,000	8,795	Dec. 1860.	2d ".....	160,000	7		1870	
do do															
Buffalo and State Line.....	N.Y. & Pa.	122½	68	1,950,950	1,040,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	593,000				
Camden and Amboy.....	N. J.	132½	96	3,798,400	8,850,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	367,000	6	100	1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7	82½	1861	
do do										2d ".....	600,000	7		1864	
do do										3d ".....	500,000	7	64	1863	
do do										4th ".....	500,000	7		1865	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,365,800	7	106	1865 & 1870	
do do										2d ".....	1,490,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,509	235,787	Dec. 31, 1860.	1st Mortgage.....	600,000	7			
do do										2d ".....	2,100,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						3d ".....	1,535,000	7			
do do										1st Mortgage.....	1,000,000	10			
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,756	7,335,403	50,386	720,705	230,119	Apr. 1, 1861.	2d ".....	400,000				
do do											200,000				
Chicago and Rock Island.....	Ills.	69½	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	1,250,000	7	80	Feb. & Aug.	
Chicago, Burlington and Quincy.....	"	86	138	4,689,340	4,814,515		1,514,428	761,830		Gen'l 1st Mortgage.	3,000,000	7	52	Feb. & Aug.	
do do										2d ".....	2,000,000	6	26	May 1.	
do do										1st Mortgage.....	2,000,000	7	105	1870	
do do										Cons. 1st Mort. S. F.	2,172,000	6	110	1873	
do do										2d ".....	613,000	6	108	1890	
do do										1st Mort. Chi. & Aur.	390,000	7		1867	
do do										2d ".....	303,000	7		1869	
do do										1st Cent. Mil. Tract	392,000	7		1864	
do do										2d ".....	245,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
Cincinnati, Hamilton and Dayton.....	Ohio.	99	60	2,155,800	1,356,000		644,928	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d ".....	950,000	7	100	1880	
Cincinnati Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d ".....	532,000				
do do										3d ".....	104,000				
Cleveland and Mahoning	Ohio.	68½		1,167,473	1,712,000	289,605	375,691	233,173	Dec. 31, 1861.	Income.....	305,509	7	80		
do do										1st Mortgage.....	850,000	7			
do do										2d ".....	469,000	7			
Cleveland and Pittsburgh.....	Ohio & Pa.	25½	196	In hands of Receiver.	4,918,325	653,821				3d ".....	244,100	8	100	1860	
do do										1st Mortgage M. L.	800,000	7	91½	1873	
do do										2d " M. L. or 1st Ex.	1,185,000	7	81	1865	
do do										3d 2d Ex.....	1,165,000	7			
Cleveland and Toledo.....	Ohio.	53½	148	3,343,800	3,850,570	106,413	919,971	493,956	May 31, 1861.	4th 3d Ex.....	1,154,000	7	64	1867	
do do										1st Mort. Jun. 1st Div.	359,000	7	96	1872	
do do										1st " " 2d Div.	263,000	7		1862	
do do										2d ".....	265,000	7		1863	
do do										1st " Tol. Nor. & Clev	521,000	7		1864	
do do										2d ".....	293,300	7		1862	
do do										Junction Income..	44,500	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	121	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	C. & T. Income..	300,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	125	98½	3,000,000	1,602,000	none	1,068,405	633,647	Nov. 15, 1860	1st Mortgage.....	519,000	7	99	1861	
do do										1st Mortgage.....	564,000	7		1862	
Columbus and Xenia.....	Ohio.	105½	54½	1,490,000	290,700	50,500	See L.	Miami.		2d ".....	303,000	7	92	1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	Dividend.....	272,700				
Dayton and Michigan.....	"	142		2,176,666						1st Mortgage.....	300,000	8			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	2d ".....	2,212,000	8			
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	300,000	7	50		
do do										1st Mortgage.....	2,500,000	7	90	1875	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report						2d ".....	1,000,000	8		1866	
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		956,061	1,219,100	249,653	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
Galena and Chicago Union.....	Ills.	73½	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	2d ".....	180,000				
do do										1st Mortgage.....	1,993,000	104	100	1862 & 1863	
Great Western.....	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	2d ".....	1,520,000	10		May 1, 1875	
do do										1st Mortgage W. D.	1,041,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report					1st " E. D.	1,350,000	7			
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573							
Hannibal and St. Joseph.....	Mo.	206		1,041,066	10,354,000	220,336	996,907	512,933	Sept. 1, 1860.	Land Mortgage...	5,000,000		26		
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	Mortgage Conv....	1,354,000	6	30	1873	
Hudson River.....	N. Y.	51½	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	927,000	7	110	1869 & 1870	
do do										2d S. F.	4,000,000	7		1880	
Illinois Central.....	Ills.	63	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	3d ".....	2,000,000	7	104	1875	
do do										4th ".....	1,840,000	7	104	1875	
do do										Optional.....	38,000	7	100	1868	
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	Construction.....	12,885,000	7	100	1875	
do do											4,115,000	7	96	1875	
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		Debentures.....	42,740	7			
do do										1st Mortgage.....	600,000				
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	977,952	36,773	Dec. 31, 1860.	2d ".....	578,000	10			
Iowa Central Air Line.....	Iowa.			245,000	755,000	No report	No report			Income.....	38,700	10			
Iron.....	Ohio.	13		118,865	50,000	No report	No report			1st Mortgage.....	500,000	7	85	1866	
										2d ".....	400,000	7			
										Real Estate Mort...	200,000	7	85		
										1st Mortgage.....	649,854				
										2d ".....	314,000				

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.		86½	\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st ".....	289,000	7	75	1861
do										2d ".....	392,000	7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.		99	Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st ".....	260,000	7		
do										2d " Conv.....	1,000,000	7		
do										3d ".....	600,000	7		
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiver.						1st Mortgage E. D.....	903,000		89	
do										2d " E. D.....	1,000,000			
do										1st Land Grant W D.....	4,000,000		21	
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report			1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.		29	514,433	130,000		168,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883
Little Miami.....	Ohio.		65				1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000			
Louisville and Frankfort.....	Ky.		65	1,169,59	384,519		245,910	98,879	June 30, 1861	1st Mortgage.....	248,000			
do										1st Mortgage.....	2,000,000	7		
Louisville and Nashville.....	Ky.		268	5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.....	400,000			
do										1st " Memphis Br.....	500,000			
Louisville, New Albany and Chicago..	Ind.		288	2,800,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.		87	1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861
Marietta and Cincinnati.....	Ohio.		203	8,561,213	196,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv.....	2,500,000	7		1868
do										2d ".....	2,000,000	7		
do										3d ".....	1,500,000	7		
do										Sterling Income.....	333,000	4		
Michigan Central.....	Mich.		68½	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	Domestic.....	928,617	6	98½	1872
do										1st " Sterling.....	467,483	8	84	1869
do										1st " Conv.....	500,000	8	96	1860
do										1st " unconv.....	250,000	8	106	1869
do										1st " Dollar Conv.....	2,598,000	8	108	1882
do										1st " S. F. Conv.....	4,153,000	8	99	1860
Michigan South'n & North'n Indiana	Mich. &		31½	9,018,200	9,714,704	437,886	2,075,450	1,030,829	Mar. 31, 1861.	Mort. Mich. So.....	991,000	103	100	1861
do										" Nor. Ind.....	985,000	101	100	1868
do										" Goshen Line.....	1,168,000	101	89	1877
do										S. F. Toledo.....	2,850,000			
do										2d Mortgage.....	2,465,000			
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d ".....	200,000	7		
Milwaukee and Horicon.....	Wis.		42	1,101,200						1st Mortgage.....	420,000	8		
do										2d ".....	600,000	8		
Milwaukee and Prairie du Chien.....	Wis.		34	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7		1891
Milwaukee and Western.....	Wis.		71	No report										
Mississippi and Missouri.....	Iowa,		55	No report						1st Mortgage Conv.....	1,000,000	7	96	
do										2d " S. F.....	400,000	8		
do										Oskaloosa Div.....	1,425,000	7		
do										Land Grant.....	7,000,000	7		
New Jersey.....	N. J.		34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000	102½		
New Jersey Central.....	N. J.		64	2,260,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.					
New York and Erie Pref.....	N. Y.		68½	Sold under mortgage			5,500,916	1,979,408	Sept. 30, 1860	1st Mortgage.....	3,000,000	110		
do			38½							2d ".....	4,000,000	110		
do										3d ".....	6,000,000	104		
do										4th ".....	4,900,000	93		
do										5th ".....	1,792,500	82½		
New York and Harlem Pref.....	Conn.		40½	5,717,190	6,055,752	.....	1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	105½	1873
do			16							2d ".....	1,000,000	7	101	1864
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	7	94	
do														
New York Central.....	N. Y.		93½	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H. Mortgage.....	7,923,000	6	101	Dec. 1, 1866
do													103	Oct. 1, 1875
Northern Central.....	Md.		138	2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	3,000,000	7		May 1, 1883
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,750,000	6		June 15, 1864
Ohio and Mississippi, Eastern Div....	Ohio & Ind		192	Lensed.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6		1885
do										3d ".....	316,995			
do										Construction.....	4,637,920			
Ohio and Mississippi, Western Div....	Ills.		148	.....	3,292,403		No report			Income.....	3,391,185			
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000	6		
do										" S. W.....	2,800,000			
Pennsylvania.....	Pa.		359	13,261,960	17,163,947	367,489	7,300,900	3,646,938	Dec. 31, 1861.	Construction.....	4,500,000	6	104½	1888
do										1st Mortgage Conv.....	4,900,000	6	98½	1875
do										2d ".....	2,319,000	6		
do										3d " Sterling.....	1,957,440	6		1875
Peru and Indianapolis.....	Ind.		74	1,100,090	820,000	80,000	No report			State Works.....	7,200,000	5	89	
Philadelphia, Wil. and Baltimore.....	Del.		98	5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6	99½	1884
do										Improvement.....	119,000	6		1863
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	1st Mort. O. & P.....	1,000,000	7	96	1865
do										2d ".....	750,000	7	83	1866
do										1st " O. & I.....	1,000,000	7		1872
do										2d ".....	360,000	7		1873
Pittsburgh and Connellsville.....	Pa.		49	1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.....	500,000			
Racine and Mississippi.....	Wis.		104	2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.					
Sandusky, Dayton and Cincinnati. ..	Ohio.		170	2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856
do										".....	997,000	7		1866
do										".....	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.		125	848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886
do														
Springfield, Mt. Vernon & Pittsburgh..	Ohio.		50	1,000,000	1,050,000	200,000	110,200	53,100		1st Mortgage.....	500,000			
do										2d ".....	450,000			
Steuensville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d ".....	900,000	7		1865
Terre Haute, Alton and St. Louis....	Ills.		208	No report						1st Mortgage Conv.....	1,000,000	7	110	1862
do										2d " Conv.....	2,000,000	7	92	1868 & 1870
do										1st " Bel. & Ill.....	517,000	7		1873
Terre Haute and Richmond.....	Ind.		100	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	92	1866
do										1st Mortgage.....	3,400,000	7	92	Aug. 1, 1865
do										2d ".....	2,500,000	7	70	Nov. 1, 1878
do										Mort. Coupons.....	94,049			1880 to 1885

the mining interests of Colorado Territory. Gentlemen, I thank you for your attention.

Dr. Wozencraft, of California, arose and said: After thanking the gentlemen from Colorado for the information he has given us, and which, I am satisfied, is strictly accurate, let me say that, from the knowledge I have acquired from theory and the examination of all the reports and surveys, I would merely suggest that it is hardly the time to discuss routes. Though we may admit that the country is unusually rich in gold, the probability is that, by the time we have to locate this route, we may find it is as difficult to find a route not filled with these precious minerals, as it is now to find one with.

The gentlemen in their report, say that it will be the means of opening up vast fields of mineral and auriferous wealth. I was pleased to hear of the easy gradients, and this brings me to a point, which, by your courtesy, I will mention. I considered, when this bill was passed, it was one of the most magnificent ever passed by Congress. The donation was not only large, but amply sufficient to induce us to take it, and to show our patriotism by making this railroad, and thus binding the different parts of the Union together.

As to the auriferous region of Pike's Peak, I am not disposed to state anything; but when I am told that it is the richest in the world, I am able to say that we have in California, a vein which yields fifty million dollars per ton. By the time we have come to locate the road, I hardly think we shall need to make any deflection. I am in hopes the convention will now proceed to the adoption of the resolutions, and the admission of amendments thereon. I also hope that the same expedition may be used in the opening of books for subscription, and arranging for our reassembling at an early date.

Governor Evans said at the proper time, he should offer a resolution relating to the location of the road. That the route he advocated was about 40° north latitude. Dr. Wozencraft replied, that from the easy grades of Humboldt Valley, he was satisfied the company would have to make a deflection and adopt that route. Governor Evans replied that he believed the route he advocated, being the most direct, would supersede the circuitous one advocated by Dr. Wozencraft. Mr. Ruggles asked if any gentlemen from California could inform him how much gold was annually produced in California. Mr. Ryan of California replied it was utterly impossible to state, for the reason that much was taken away by miners. About \$50,000,000 were shipped and great developments were taking place daily. Mr. Mills of California said there was no doubt \$50,000,000 a year were produced. Mr. Robinson, of California deemed it unnecessary to enter into statistics of what California has produced. He had no doubt the mines of California produced at least \$60,000,000 in gold a year. Much was shipped, but owing to developments going on much was invested there. He did not regard it very important to go through a country known to be a mineral country. The minerals would be jumped by the workmen who first struck the leads. He wished particularly to mention in regard to this matter, that he was satisfied there was no

question that the whole region in the vicinity of Salt Lake was rich in all kinds of minerals. Salt Lake people say they can manufacture the iron cheaper than it can be manufactured elsewhere and taken there. The only question was as to fuel. If fuel was abundant, the resources of the country were ample to build the road. He believed, in a few years, the whole current of exchange would be transferred from London to San Francisco. There was no doubt there would be this year \$20,000,000 of silver exported from San Francisco, most of which would go to India. Mr. Ruggles stated that the reason he had inquired into the product of the precious metals was, that the word fiscal occurred in the resolution. He thought that every particle of gold and silver produced here crossed the Atlantic, and was used to purchase foreign merchandise which paid its duties to the government. California has produced \$600,000,000 of gold, it has bought \$600,000,000 of merchandize and paid \$150,000,000 of duties to the National Treasury. If Colorado could send us \$5,000,000 of gold, it would buy \$5,000,000 of merchandize and pay \$1,250,000 into the National Treasury in duties. And he desired to show the government that this road would repay them for the bonds they were to give them. Individual enterprise had spent \$420,000,000 between Portland and the Missouri River, and in order to realize the mineral products of Colorado Territory and make all these things certain, of achievement a road, or part of a road, five hundred and forty miles in length was all that was needed, so that, in reality, it was only one day's travel.

Governor Evans arose to say that the estimate of \$5,000,000 which he had given was only as the product of the Gregory region. It was estimated that Colorado would produce this year from \$6,000,000 to \$7,000,000, and would steadily increase every year hereafter. General Curtis moved that the convention adjourn till this P. M. at 4 o'clock. Mr. Ryan of California moved to adjourn till 11 A. M. tomorrow. Governor Dennison in behalf of himself and others hoped the convention would sit as long as possible each day, that the business might be completed and allow gentlemen who are needed home on pressing business to return. Question was taken on adjournment and lost. Mr. Bloodgood moved that when we do adjourn, we adjourn till 4 P. M. this day—carried. Mr. Bloodgood then arose and addressed the convention in an able and elaborate speech, which we will endeavor to give in full in a subsequent issue.

On taking his seat Mr. Bloodgood handed to the Secretary the following letter from the president of the National Bank in New York:

NATIONAL BANK, NEW YORK Aug. 25, 1862.

S. Dewitt Bloodgood, Esq.

Dear Sir—Should it be deemed advisable for the Pacific Railroad Company to have a financial agency or place of deposit in the city of New York, as a friend to that great

undertaking it would afford me the highest gratification if the National Bank be selected for that purpose.

Yours very truly,
(Signed) JAMES GALLATIN.

The question being now on the adoption of the 1st resolution it was carried.

The Secretary then read the second resolution. Pending which on motion the convention adjourned.

SECOND DAY—AFTERNOON SESSION.

On the opening of the afternoon session the President, Mr. Ogden, stated that he had seen the President of the Illinois and Michigan Canal Company, and he had suggested 8½ or 9 o'clock to-morrow morning as the hour to visit the Hydraulic works of that company. On motion, the hour of 8½ A. M., to-morrow was adopted. On motion, Mr. Farnum, of Illinois, was added to the committee on business. The further consideration of the resolutions of the committee was then resumed. Mr. Ruggles, of New York suggested that as the discussion of the resolutions would probably occupy considerable time, the further consideration be dispensed with. Opposed by Governor Dennison of Ohio. Dr. Wozencraft, of California, moved they be adopted as a whole. This was opposed and withdrawn and the separate consideration of the resolutions, resumed. The question was taken on the adoption of the second resolution. Carried. The third resolution was then read and on motion adopted. The fourth resolution was read and on motion adopted. The fifth resolution was then read. Mr. Ruggles adverted to the enormous destiny of the nation in the Pacific, and gave a high compliment to the Emperor of Russia for his sympathy. The resolution was adopted. The sixth resolution was then read and on motion adopted. The seventh resolution was then read. The question being taken it was adopted. The preamble was then read. The question was put and adopted unanimously. The resolution relating to the opening of books of subscription was then read. Dr. Wozencraft, of California, offered the following resolution:

Resolved, That subscription books be opened at as early a day as practicable, in Salt Lake City, and be kept open to as late a day as practicable.

Gov. Evans, of Colorado, suggested it would be better to insert Salt Lake City in the general resolution. Dr. Wozencraft explained the reason for his resolution. The stock would be taken to a considerable extent by the heads of the church, and it would be done at once, without competition.

General Curtis called for the reading of the resolution, which was done. Mr. Ryan, of California, called for a division of the question. Dr. Wozencraft then explained the importance of receiving subscriptions at Salt Lake City to insure the rapid construction of the road through Utah, which could be built by the aid of the Mormons in half the time

that could be done otherwise. Gen. Curtis, of Iowa, then said that he feared the opening of books at such distant points would occasion delay in perfecting the organization. The communication between Salt Lake City and the east was now very uncertain. He would prefer only to open books in one or two places and get the names of good men and perfect the organization at once. It would give confidence to the people in this company. He did not think it worth while to open books in Colorado or Utah. Dr. Wozencraft took issue with Gen. Curtis. He was anxious this stock should be taken as much as possible on the line of this road. It was due to Utah that she should be consulted, and should have an opportunity to take a large portion of the stock of this road. It was the most prudent to interest this population in this great enterprise. That population control the Indians for nearly seven hundred miles round, and it is owing to their friendly interposition that we are not now engaged in an Indian war in that quarter. They are in heart Union men; wish to remain in the Union; in fact, have applied for admission as one of the States in this Union. They are an industrious people, and what they engage to do they will perform faithfully. Mr. Graham, of Michigan had no disposition to turn a cold shoulder to any one disposed to aid in the construction of this work, but he thought for the reasons already given, it was not prudent to open books in this distant place, and he deemed it not according to strict construction, they had no right to open books there. Dr. Wozencraft claimed that Utah was as much a territory of the United States as Colorado or Nevada. The Chair decided the convention had a perfect right to open books in Utah, and he deemed it very desirable to secure the co-operation of the people of Utah, but it might be a question as to whether it would involve such as would invalidate the organization. Mr. Ryan arose to name Portland, Oregon, as a place to open books.

An amendment was offered to Dr. Wozencraft's resolution, that Salt Lake City, Utah, be inserted in the resolution of the committee. Accepted by Dr. Wozencraft.

Mr. Tilden feared that this would involve great delay. The law required a notice of thirty days in every State in which books were to be opened, and if books were to be opened in Oregon, thirty days notice would have to be given, and it would take too long to do this. He deemed it would be best to confine the subscription to a few large cities. There was no provision by which subscriptions should not be received after the organization under the law. He called for the reading of the resolution as offered by the committee. Mr. Bushnell, of Connecticut, said he could see no difficulty to arise with inserting Salt Lake City or Portland, Oregon, with the last clause of the resolution as read. Mr. Tilden replied he did not think it best to insert the name of any place where it was impracticable to carry out the instructions, and the officer would be compelled to cancel. Mr. Bushnell thought it might be judicious to cancel half these places, but supposing after this the \$2,000,000 were not subscribed, then these places were kept as a reserve. Mr. Ryan said he should insist on the vote being taken on inserting Portland, Oregon, notice could be given by Telegraph and little delay occasioned. The Pacific coast furnished the gold. The Chair then stated the motion of the gentleman from California was not in order now but after the amendment of the gentleman from California was passed it would be. Dr. Wozencraft insisted on his amendment. Mr. Tilden,

of New York, was proceeding to discuss it further, when Mr. Latham of the District of Columbia, by permission, moved that Mr. Silas Seymour, late Engineer of the State of New York, be invited to a seat on the platform. Carried. The question was taken on the resolution of Dr. Wozencraft. Carried. Dr. Wozencraft asked if the Chair could not give such discretion to the Commissioner for Utah as to open books as early as practicable. It was decided that as little discretion as practicable be allowed. Mr. McPherson moved for the purpose of testing the sense of the convention to strike out the names of all places named in the resolution except New York and Chicago. Pending Mr. McPherson's statement, a joint order was passed, and the consideration of Dr. Wozencraft's suggestion was resumed. Mr. McPherson claimed the right to move an amendment. The Chair ruled Mr. McPherson out of order. Dr. Wozencraft on suggestion of the Chair, appealed from the decision of Chair, that his suggestion was out of order. Mr. Ryan sustained the decision of the Chair. Mr. Smith, of Iowa, stated it would be best to adhere to the letter of the law, and as the law said the principal cities of the States of the Union, and it would be best to strike out every place mentioned in this resolution except New York, Chicago and San Francisco. It would simplify the organization. Dr. Wozencraft took issue with Mr. Smith, he read in the law the words, the principal cities of the United States. The question was taken on sustaining the decision of the Chair. Carried. Mr. McPherson renewed his motion to strike out all the names mentioned except New York, Philadelphia, Boston, Chicago and San Francisco. It would simplify the organization. In this resolution he left out his own city, and he did so for the purpose of benefitting the company. Mr. Cass sustained the motion of Mr. McPherson and seconded his resolution. Mr. Ruggles moved to add St. Louis, as Congress had designated six principal cities. Mr. McPherson accepted the suggestion. Dr. Wozencraft opposed the resolution, on the ground that it was a national work and that it would be better to extend than curtail. It would involve no delay. Mr. Poor, of New York, arose to say that it would be necessary to unite the whole country to carry it out, and if the proposition of the gentleman from Missouri prevailed it would kill the enterprise, as it would create jealousy against the large cities, and it would be thrown into the hands of a few capitalists who would have no sympathy from the rest of the country. Mr. McPherson replied that if \$2,000,000 were all that were wanted, the views of the gentleman from New York might be correct, but it was only the beginning. And after the permanent organization books could be opened every where. Mr. Bloodgood, of New York, said it would be necessary to appeal everywhere and he wanted the resolution to stand as it was. But for the local support of the farmers the Western roads would not have been made. General Curtis said he had two things in view, first, to get the money—next to get a firm organization and vested rights, and wanted to see this done before the last Congress was displaced by a new one. He hoped the resolution would pass. Governor Dennison arose to name Cincinnati as an important city. Mr. McPherson accepted the suggestion. Dr. Wozencraft insisted that all places should have the opportunity to subscribe. Mr. Ryan arose to say he pressed the name of Portland, because he should not like to see Portland left out, when all the cities were named. But he should support the res-

olution. The Chair believed it to be the best policy to open books in all the places named except in the territories. The vital question is can we get the stock subscribed and get a vested organization. Mr. Bushnell, said, perhaps he was the originator of the plan of dividing it up. He believed it would damn the whole enterprise to have ten N. Y. capitalists take the whole \$2,000,000 stock. Mr. Bushnell moved as an amendment to the motion of the gentleman from Missouri to strike out only the names of places in the territories. Mr. McPherson still insisted his plan was the best. Mr. Robinson, of California, advocated retaining the names of all the places. It would not delay the matter. Give every man an opportunity to subscribe and have a voice in the choice of the directors. It would be a misfortune to have a few individuals control the first election. Mr. Ruggles thought it was very evident the object of the convention was to appeal to the whole country. He hoped the names would be all retained. Mr. Scranton, of Pennsylvania, moved to defer the further consideration of the motion till to-morrow morning. The next resolution was then read. That the security to be given by the Treasurer shall be his bond. Mr. Gilmore arose to speak on the motion postponed till to-morrow. Governor Dennison, of Ohio, called for the reading of the resolution, and suggested to insert, and for the faithful accounting for the monies, and moved to lay over the resolution till to-morrow, for it should specify further conditions. Mr. Tilden moved that the rest of the resolutions, framed by the committee at its afternoon session be read. Adopted. And the resolutions were read. Mr. Smith, of Iowa, gave notice that he should introduce this morning a resolution that the President and Secretary be authorized to file the written acceptance of this convention with the Secretary of the Interior, according to the provisions of the act.

The President announced that a tug boat would be in readiness at 8½ A. M. to-morrow to convey the Commissioners to Bridgeport, and also that Mr. Cass, President of the Pittsburgh, Ft. Wayne & Chicago Railroad preferred the courtesies of his road to any members of the convention desiring to go over it.

Moved that the convention adjourn till 10 o'clock, A. M.

(Concluded in our next.)

Michigan Central, third week in August:

1862.....	\$48,015 48
1861.....	31,507 47
Increase (equal to 55 per cent.).....	\$17,508 01

Michigan Southern, third week in August:

1862.....	\$33,039
1861.....	36,777
Increase (equal to 38 per cent.).....	\$3,603

Cleveland and Toledo Road, third week in August:

1862.....	\$18,932
1861.....	15,329

Galena and Chicago, third week in August:

1862.....	\$28,050
1861.....	35,782
Decrease.....	\$7,842

The balance sheet of the Pacific Mail Ship Company, upon which its last dividend was made, was as follows:

Net earnings, 3 months.....	\$45,0
Less depreciation, including loss of the Golden Gate.....	\$200,000
Quarterly dividend.....	200,000
Carried to surplus income.....	50,000
Profits of the quarter 11½%	\$450,000

IMPROVED POWER CAR BRAKE.

BROWN'S PATENT.

It has been a great desideratum in rail-roading to obtain a power car brake which should be under the instant care of the engineer without resorting to the expedient of signalling the brakemen and which should at the same time be capable of immediate application to every car. Many brakes have been invented to secure this end, but none of them so far have succeeded in gaining general favor. The brake to which we now desire to call attention is the invention of Mr. J. M. Brown of this city, a practical railroad engineer and well known as a manufacturer of railroad steam gauges.

To apply this brake to a car, the rod which connects the forward and rear brakes in the common hand brake is cut in the middle, and a short lever is bolted at right angles to the sections—one section being bolted at the end of this lever and the other 8 or 10 inches from it. On the other end of this lever is a pulley. Now it is plain that on drawing this pulley forward both brakes are tightened at once exactly the same as in the hand brake. A short distance forward of the pulley on the lever, another pulley is fastened to the body of the car. A wire rope is now extended from the forward end of the car and passed first around the moveable pulley, then back around the fixed pulley, then to the rear of the car. On either end of this wire rope is a hook by which to attach it either to the engine or to the corresponding rope of another car. The rear end of the rope on the last car is hooked to a firm support on the car. Now imagine a train of cars attached to each other in the usual manner and the brake ropes all connected. When the rope on the forward car is drawn forward by a fixed strain, it will move on till every portion is subject to an equal strain and every moveable pulley will be drawn forward by the same strain that is applied to the rope, and consequently every brake will be applied at the same instant and with the same strain.

It now remains to describe the means by which the wire rope is drawn forward. An extra shaft is fastened on the frame of the engine back of the drivers. On the end of this shaft is a friction wheel, say 18 inches in diameter which is moved by a handle under the control of the engineer, up to the driving wheel. This gives motion to the friction wheel. On this shaft is a reel or spool on which the rope is to be wound up. One end of this reel presses against a fixed bearing which revolves with the shaft. The reel itself is loose upon the shaft. The other end of the reel also presses upon a bearing which revolves with the shaft, but which is pressed up against the end of the reel by a rubber spring, which may again be tightened to give the requisite friction. Now when the friction wheel is pressed by the handle against the

driving wheel, motion is given to the shaft and thence to the bearings, which, pressing against the reel, give motion to the reel, and the rope is wound up and, per force, the brakes are all applied at one and the same instant and with the same pressure. In case the shaft revolves too rapidly and the tension becomes too great, the reel slips on the bearings, so that it is impossible for the engineer by a too sudden application of the brake or a too long continuance of it, to snap the rope and thus disable his brake. But in case of difficulty or accident to the apparatus, the sections of the brake-rope are connected with a short chain, thus leaving the brakes as useful as a hand brake as ever.

There is another point connected with the action of this brake that needs explanation. When the engineer shuts off steam and commences the application of the brake, the whole train immediately crowds upon the locomotive and the rope is wound up to its shortest possible length. As soon as the brakes take effect the cars are held back by friction on the rail and spread out again. Were the rope held by a rigid fastening on the reel, it is probable that it would be broken by the sudden jerk. But as the reel is held by its frictional bearings as soon as the tension exceeds the friction the reel unwinds, still holding the brakes by the same amount of strain as that by which they were wound.

The advantages claimed for this brake by the inventor are its simplicity and uniformity of action, and the instantaneous manner in which it may be operated. We believe it has now been in use on the Cincinnati, Hamilton and Dayton Railroad, and on the Indianapolis and Cincinnati Railroad for some three or more months, and that it is now on trial on the Little Miami and Columbus and Xenia Railroads. Should it meet with a favorable decision on these roads, it is quite safe to conclude that it is a deserving invention and meets the wants of the railroads. From the experience so far had it is claimed, that an ordinary train may save some twenty minutes in the stops usually made in a hundred-mile run over the old hand brake system. This is a great desideratum and will certainly make railroad men look with great interest on its success.

Philadelphia, Wilm'gton & Baltimore RAILROAD!



FOUR PASSENGER TRAINS DAILY!

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11, P. M., Express.

On Sundays at 3.30, A. M., and 11, P. M.
Leave Baltimore for the North and West daily, at 8.30, A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail; and 7.00 P. M., Express.

On Sundays at 7, P. M., only.
Through connections made for all points at the North, East and West.

WM. CRAWFORD, Agent.

J. T. CRAWFORD,

ATTORNEY AT LAW,

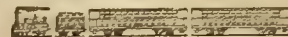
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POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

—
SHORTEST ROUTE BY THIRTY MILES.
—

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS.

CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:00 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:30 P. M.

THIRD TRAIN—6:30 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars. Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

BUSH & LOBDELL. Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,
MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on the Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition

The well-earned reputation of this Road for
SPEED, SECURITY AND COMFORT
Will be more than sustained under the reorganization of its business.

In addition to the *Unequaled Attractions of Natural Scenery* heretofore conceded to this route, the recent *Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting WASHINGTON CITY en route*—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the **ONLY ROUTE** by which passengers can procure *through tickets and through checks to WASHINGTON CITY.*

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wcs. Ag't, Bellaire, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

**NEW YORK, BOSTON,
AND ALL EASTERN CITIES,**

CARRYING THE

Gt. Western United States Mails.

Express TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6.

CHARLES MINOT, Gen'l Sup't

W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(SUCCESSORS TO and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that pains will be spared to give entire satisfaction in every case.

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE.
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM

PITTSBURGH TO PHILADELPHIA

(with close connections from Western Cities.)

ALL CONNECTING DIRECT TO NEW YORK.

**THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.**

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (430 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM

PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.

BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

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By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburg with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "PA. PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburgh.

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J. P. JOHNSTON, Ripley, Ohio.

JOHN TODD, Covington, Ky.

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R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.

L. L. HOUSTON, Gen'l Ticket Agent, Philadelphia.

H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:00 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton. RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day., Toledo & Day. Huntsville.....	5:20 P. M.	10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.
Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	6:00 A. M.	11:10 P. M.
Indianapolis and Terre Haute.....	6:00 A. M.	11:13 P. M.
Decatur, Springfield & Quincy.....	11:30 A. M.	3:40 P. M.
Chicago Night Express.....	6:30 P. M.	16:00 A. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	5:00 A. M.	10:05 P. M.
Seymour Accommodation.....	2:00 P. M.	1:15 A. M.
Louisville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

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Om nibuses call for passengers as usual.

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General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

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General Ticket Agent Indianapolis & Cincinnati Railroad.

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Every article necessary to drill the TUBE-PLATES and to set the TUBES.
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Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enamelled Iron WATER PIPE.
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Ventilating do for dwelling Houses, &c.
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LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotive Engines.

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SUCCESSOR TO

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Send or call for a circular, containing all particulars, prices, testimonials, etc.
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Railroad Machinery, Tires, etc.

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Rebuild and Repair Locomotives.

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Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON, } Editors

CINCINNATI:
THURSDAY, SEPTEMBER 18, 1862.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.

Cincinnati, Hamilton & Dayton—

Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	6.45 P. M.

Dayton, Lima, Toledo & Huntsville—

Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	10.10 A. M.
Eastern Night Express.....	10.00 P. M.	5.40 A. M.

Sandusky, Dayton & Cincinnati—

Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.10 A. M.

Marietta & Cincinnati—

Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.

Ohio & Mississippi—

Mail.....	5.00 A. M.	10.05 P. M.
Seymour Accommodation.....	2.00 P. M.	1.15 P. M.
Express.....	5.00 P. M.	5.53 A. M.

Indianapolis & Cincinnati—

Mail.....	8.00 A. M.	11.10 A. M.
Chicago Express.....	6.30 P. M.	10.00 A. M.

Dayton & Michigan—

Toledo, Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.

Cincinnati & Chicago Air Line—

Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.

Cincinnati, Wilmington and Zanesville—

Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.

Kentucky Central— (City time.)

First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

UNION PACIFIC RAILROAD.

MEETING OF THE COMMISSIONERS.

(Concluded.)

THIRD DAY'S PROCEEDINGS.

Morning Session, 11 A. M.—Minutes were read and adopted. The President read letters received from the superintendents of the various lines of railroad running eastward, offering passes to those members of the convention who traveled in that direction, and also from the railroads running towards the Mississippi, tendering passes to those members who wished to visit the banks of "the Father of Waters."

On motion, John B. Elvis, Col. R. B. Macon, Hon. George Bliss, John Van Northwick and Wm. E. Barney (the eminent civil engineer), were invited to take their seats upon the platform.

L. A. Thomas, of Iowa, moved that the speech of S. Dewitt Bloodgood be published in pamphlet form. After discussion, the resolution was withdrawn, to give place to the regular business before the convention on its adjournment.

Mr. McPherson arose to say that he had great respect for the opinions of the President and his friend from New York; said they did not mean to absorb the stock, and as his plan seemed not to be popular, he should withdraw his amendment. The Chair stated that each delegation would be responsible for the success of the enterprise in their State. The reading of the resolution was called for. Mr. Ruggles, before proceeding to the reading of the resolution, said he desired to make some statements as to the importance of Salt Lake City, and he had ascertained some facts, which he wished to state before the convention. Mr. Ryan moved that Mr. Ruggles have leave to make such statements. Carried. Mr. Ruggles said:

The present convention is not aware that there is, at the present time, a line of telegraph open to Salt Lake City, and that what was done here yesterday was known there now, and we are waiting for an answer from Brigham Young approving of our proceedings. I will read a telegraphic communication from that city, which was dated September 3:

"Please let me know if my brother is killed or wounded. Any favor you render mother will be appreciated."

Human nature beats, even in Utah; the people of that Territory are a strange, and perhaps a misguided race, but there are more than ninety thousand of them. They are not to be despised, but to be used, and if we are wise, we shall not quarrel with the community of people on our way, who occupy a central position on this continent.

We are bound, by this charter, to build a telegraph on this line; we are bound to maintain it. If we do not complete our work by the year 1874, our whole property is forfeited. This is a feature we have not talked of yet. We are on the second division of our labors, and we shall not do so wisely if we miss having the support of the people of Utah. There is a saving clause in this bill, which provides that this company may contract with the existing telegraph companies.

He then traced the history of the constructions of the telegraph line to the Pacific, giving special praise to Mr. Sibley for the great energy and dispatch used in it. In consequence of this line being already in existence, there was no need for this company to make one, and he congratulated the convention that so much of their work was done. He then called attention to the very great achievement

of Mr. Sibley in arranging with the autocrat of the Russias the construction of a telegraphic line from Moscow to the United States. He portrayed in glowing colors the very great destinies that were reserved for these two countries.

Dr. Wozencraft, of California, arose to express his thanks to Dr. Ruggles for his kind aid. The Mormon population had aided in putting up the poles for that telegraph line. Mr. Robinson arose to state that he was there at the time. Brigham Young's son-in-law undertook the contract, and for want of means was about to fail. Young called him to him and ordered him to do it if it cost him every cent he had. Young afterwards fulfilled the contract. The resolution was then read. Mr. Cass asked if the first Wednesday in October was not too soon. Mr. Ryan, of California, now moved that Portland, Oregon, be added to the list. General Curtis of Iowa then stated the arguments adduced had induced him to change his opinion several times. He thought when we differed widely we had better compromise and leave the resolution where it is. Mr. Ryan said if any reason can be assigned why Oregon, that great State, should be passed by when every little town in the United States was included, he would willingly withdraw his resolution. But he said Oregon was too important not to be included. Mr. Monell of Nebraska had listened with pleasure to the discussion, but he thought we had not yet reached the proper point. Congress had made it the duty of the commissioners to open books in the principal cities of the United States; they intended it should be done wherever they had appointed commissioners. He knew of no smaller place than his own, and assured the gentlemen that it would subscribe for at least one share. [Applause.] And though but one share the people of the territory would regard it with pride. [Continued applause.] "The Territory of Nebraska is now in its infancy and looks to this great road to develop its vast resources, and to-day I would subscribe all I have in the world if it were necessary, and the road could be established in no other way. [Applause.] It would be a good investment and one that would pay in dollars and cents. [Continued applause.] Gentlemen who talk about this road not paying do not know the country through which it will pass. These hills that are abounding with ore do not contain the wealth that the land through which this road will travel is sure to develop. [Applause.] The people of Nebraska have sent but one regiment of volunteers in the field, yet they are as proud of that one regiment as New York is of her hundreds. This railroad is behind the times. [Laughter.] While you have been talking about it, the State of Iowa which was at first included in the project, has built her branch of it, and Nebraska and Kansas have been settled where on the maps five or six years ago was marked out a great American desert. If you do not build this road in five or six years, California, Utah, Colorado and Nebraska will build it for you. [Cheers.] The tide of emigration has passed on and found no limits to the green fields. For weeks and weeks and weeks I have seen one hundred wagons a day pass from the Missouri river towards the Rocky Mountains; and I would like to impress it upon the minds of eastern gentlemen that there is no desert on this side of the Rocky Mountains. It is a mistake that the Valley of the Platte is desolate, though there are parts of it where the soil is not deep. In 600,000 square miles but 20,000 altogether is not cultivatable. It costs New England more to pre-

pare the ground for planting than it does the farmers of the Platte to cultivate their crop. We should go into this work with too much spirit to quarrel about the route it is to take. [Cheers.] If the road won't come to us we can go the road.

A voice: "How about coal"?

Mr. Curtis replied: "You begin to find coal when you come to the base of the Rocky Mountains. On the other side there are vast beds some six, eight, or ten feet in width.

Mr. Wozencraft, of California, said that coal had been found in Nebraska, but upon the Pacific slope it is light.

Mr. Corby, of Missouri, stated that coal had been discovered in the Northern tier of counties in Kansas, and the mines had been worked some four, five, or six feet deep. In Marshall or Brown counties mines of coal of an excellent quality have been worked six feet deep. Coal in large quantities abounds all over that region of country.

A voice: On the Big Sioux there are several strata from four to six feet deep.

Governor Evans laid before the convention a letter from Mr. Ebert, a civil engineer of great ability. The letter was as follows:

DENVER CITY, Aug. 8, 1862

His Excellency, Gov. Evans:

Sir—In reply to your honored letter of this day, I respectfully make the following statements about the valley of the Republican Fork, as far as my survey in 1860 extended:

The valley of the Republican, west of the point where it leaves Nebraska and enters Kansas, to the 101st degree of longitude, is nearly a western course, and, on an average, one and a half miles wide, with a level, rich bottom, covered with cotton wood timber of good growth, sometimes only in small streaks along the river, sometimes extending to half a mile in width. Only a few miles are entirely without woods. From the north many creeks with good bottoms, and partly shaded with ash and oak, empty into the Republican. The rise of the valley is very regular and gradual. I found by actual leveling all the way up only four to five feet rise to the mile. In regard to constructing a railroad this valley is equal to that of the Platte, with the additional advantage that useful timber can here easier be acquired, and perhaps all that is needed for building the road may be had at not very great distance from the valley.

Yours most respectfully.

(Signed)

T. J. EBERT.

P. S.—On the 11th day of August, 1862, Mr. McAlter and myself entered upon a preliminary survey from St. Joseph, in Missouri, to Denver City in Colorado Territory, by authority of the then so called Roseport and Marysville Railroad Company. We did not succeed in finishing said survey, but were stopped at the end of November near the 101st degree of longitude by the Cheyenne and Sioux Indians.

(Signed)

T. J. EBERT.

Civil Engineer.

Governor Evans stated that the plains would support immense herds of cattle. Mr. C. G. Hammond moved that Governor Wood of Illinois be invited to a seat upon the stage. Dr. Wozencraft moved to insert Carson City. Mr. Poor moved to amend the resolution by adding the names of the following places:

Cincinnati, Cleveland, Ohio; Louisville, Kentucky; Buffalo and Albany, New York; Pittsburgh, Pennsylvania; Wheeling, Virginia; Portland, Oregon; Carson City, Nevada Territory; Dubuque, Iowa.

This amendment as agreed to, and the resolution as amended was then adopted.

Mr. Platt Smith of Iowa moved that the

convention authorize the president and secretary to file with the Secretary of the Interior the acceptance of the charter. Pending which, Mr. Fletcher, of Rhode Island, offered the following resolutions:

Resolved, That here and now the Board of Commissioners proceed to open books of subscription for stock in the Pacific Railroad Company.

Resolved, That the commissioners be requested to begin the subscription by taking not less than ten shares each.

Resolved, That, so soon as two thousand shares shall be in good faith subscribed for and ten dollars per share actually paid into the treasury of the company, the said President and Secretary shall appoint a time and place for the first meeting of the stockholders, which place shall be in the city of Chicago, by publishing notice thereof in this city thirty days previous to the day of meeting.

On motion, the resolutions were laid on the table.

Dr. Wozencraft moved as an amendment to insert that ten dollars per share shall be required to be paid. Mr. Ryan opposed the amendment, the law required ten per cent of the stock to be paid when subscribed. Dr. Wozencraft could not understand why members of Congress should so misunderstand the letter of the law, and read the clause of the law—so soon as 2,000 shares shall be in good faith subscribed for and ten dollars per share actually paid into the treasury of the company, the said President, &c. &c.

Mr. Tilden stated that the committee who framed the resolution acted on the preceding clause, that the law required ten per cent to be paid in to secure the subscription. It would ill become the first corporators to go back to Congress after an apparent attempt to evade the responsibilities imposed by the law. He said it was true. There is some incoherence between the two clauses, and, being early inquired of as to the probable meaning, he felt bold to answer in the words of a philosopher, "What reason did not dictate, reason could not explain." Such things often happen in the acts of legislatures, and, he was sorry to say, sometimes in the constitutions of countries. The committee were of opinion it would ill become those who became the first incorporators under this act to go back to Congress, having sought to evade any portion of the bargain which Congress intended to impose as a condition in granting this great franchise. There is nothing in it to excite the cupidity of the mercenary. Whoever subscribes will do so from a spirit of liberality and patriotism, and a disposition to meet the great public necessity which it was the object of this work to carry out. So far as this commission is concerned, he was sure, up to this time, we have come together and acted upon this subject in a spirit evincing that we are performing a great public trust, in which none of us expect to have any benefit, except as individual citizens of the great country to be benefited. [Cheers.] If we organize in any other spirit, it will be a failure. Born as this is amid clouds of darkness, he still believed it would be carried forward to completion. He had no doubt but that the 18 millions of eastern people would acknowledge the debt they owe to the infant settlements of the West, that are carrying forward civilization to the very heart of this continent. [Cheers.] No man had ever felt more profoundly than he the importance of maintaining the unity of the Republic. Unity has to be maintained sometimes by military force, and sometimes by liberal forecast in legislation. He had the pleasure, about eight years ago, of attending the opening of the Rock Island Railroad, the first one that touched the Mississippi River, to which now some fifteen or seventeen extend their iron

braces, binding it firmly to the great commercial, industrial, and monetary interests of the East. On that occasion, he said, not anticipating it would be attempted to take the mouth of the Mississippi out of our possession, that we would wrench the Father of Waters from its bed and turn it till its mouth should empty in the harbor of New York. The net work of railways that cover our Northern States, and particularly the Northwest, as he understood the theory of war, are a better means of defence than all the fortresses that have ever been erected. [Cheers.] In 1814 it took two weeks to drag cannon from Albany to Buffalo. The attention of railroad gentlemen need not be called to the small space of time it now takes. There is no manner doubt but that many of the unaccountable events of the last eighteen months have been produced because those who achieved them understood how they could make this great machinery of travel and transportation subservient to the purposes of war. In all time, the chief element in the art of war, indeed, the art itself, has been little more than the art of the transportation of men, munitions, and provisions. In case we should be involved in a war with any great naval power, we have but two alternatives looking to security of California and Oregon. One is to strive for naval supremacy, and the other is to construct this interior line of communication that shall connect us with the shores of the Pacific. The expenditure of England for a single year upon her navy, certainly for two years, would build the Pacific Railroad. In that view of the case this is a work of economy. It is a work that is capable of being made self sustaining to some extent—perhaps altogether so. It is extremely probable that, after the work shall be completed, it will develop an amount of business which we do not now anticipate. In looking forward to its future, he did not fear the army that on yesterday threatened Cincinnati, or the army that may be said to threaten Washington, so much as he feared the perpetual war which paper money wages against the interests of gold everywhere and against the communication which we now propose to make. He meant the cost of wages and materials; but he believed, if this thing is properly organized,—if men who have capital have a spirit of liberality and patriotism sufficient to induce them to make the first subscription to this stock, without reference to the question whether they shall receive dividends within any moderate space of time, and take charge of its administration with reference to no local interest, no particular route, no personal end, but simply to carry out the great public trust in the spirit of trustees,—it can not fail to receive the support of Congress and of the people whenever necessary.

Gov. Dennison, of Ohio, arose and said while there seemed to be some inconsistency in the act, it was the first principal in the construction of law, it should be so construed as to be consistent with itself. When you find an apparent conflict of terms, you must look to the body of the act, and construe the seeming inconsistencies by the tenor of the act itself. Apply that simple principle to this act, and what is the result? He thought there could be but one valid construction, and he read the different clauses in the bill to show that the intent and meaning of the act was,—not that \$100 a share should be paid in, but ten per cent on the amount subscribed. He had examined carefully how it was that the rebellion has been so long sustained against the energetic measures of the government, and, if he were asked to give one reason, he would point to the railroads in the insurrectionary States; you will find that they are laid out in a strictly military and strategic manner. If, in the beginning of their railroad system, they had determined to lay out railroads for military

purposes, they would have laid them out precisely as they have done. If he had the power now as one of the means of bringing this rebellion to a termination, he would destroy every railroad in every insurrectionary State in the Union. [Cheers.] He would wager what reputation he had that, if we could this day strike from the insurrectionary States their railroad system, we could suppress the rebellion with half the force we now have in the field, in sixty days. This would prove true in the loyal States, and doubly so in connection with this great enterprise. He congratulated himself that the privilege had been allowed him of meeting here and having his name enumerated as among those who took the first practicable step in organizing this railroad under the law which Congress has given us. He should look back to this as one of the most interesting periods in his life. He could not but regard this enterprise as one of the most potent of all the military acts that can be passed by Congress, and, if that railroad were finished this day, it would be such a Monitor to the European governments as would have long since stopped all their clamor about intervention. [Cheers.] But he would not discuss this subject. He had listened with great pleasure to many gentlemen who have discussed it, and was exceedingly happy that he had the good fortune to be here.

Dr. Wozencraft asked if in strict construction after 2,000 shares were subscribed and \$10 per share paid in, it would not be competent for this body to call the stockholders and order an election. Gov. Dennison deemed it wiser and safer to take the other course.

Mr. Scranton thought it a dictate of common sense that the ten per cent should be paid in, instead of ten dollars per share. If the resolution were carried it would jeopardize the future of the enterprise. A few could monopolize the whole with a little money and thus accomplish what we all feared and wished to avoid. Dr. Wozencraft thought differently; his resolution would be the means of diffusing the stock instead of concentrating it. The question was taken on the motion and it was lost. Mr. McPherson moved to strike out first Wednesday in October and insert the first Wednesday in November. The time was too short and we had some other things to do. We had to get the volunteers the President had called for first. He wanted to give members time to go home and help the volunteers to fight this battle our country is engaged in. [Applause.] We should go home determined to try and infuse among the people a new principle that, if our Republic is worth anything, it is worth maintaining in all its parts. Mr. Bushnell arose to suggest that it would be better to add to the resolution to allow the President and Secretary to continue the books open to such time as they should deem necessary. Mr. Ryan said that it would be best to strike out the clause requiring the books to be closed at the end of two weeks. The Hon. Senator McDougal, of California, by courtesy, arose to say that there is no rule about this but the law. As soon as the 2,000 shares were subscribed, it was the duty of the Commissioners to order the election. Judge Marsh, of New Jersey, said he concurred with the Hon. Senator of California. The law says that when 2,000 shares are subscribed, the stockholders should meet and elect directors, and the books should remain open till the whole stock was subscribed. The President read the law.

Mr. McPherson moved we now adjourn till 3 o'clock P. M. By request, Mr. McPherson withdrew his motion.

Judge Marsh arose to say the law said nothing about closing books. There was no necessity to close the books before going into an election. The right rule would be that the books would be opened, and when 2,000 shares

are subscribed, notice be given and an election of directors held, and the directors should determine further measures about subscriptions of stock. Mr. McPherson renewed his motion to adjourn till half past 3. Invitation was given to the members of the convention to go over the Chicago, Alton & St. Louis Railroad, also the Michigan Southern & Northern Ind. The convention then adjourned.

THIRD DAY—AFTERNOON SESSION.

On assembling, Mr. Robinson, of California, offered the following resolution:

Resolved, unanimously, That the committee of this Board of Commissioners is hereby instructed to petition Congress, immediately upon its reassembling in December next, to amend the Pacific Railroad Company act so it shall read:

"The capital stock of said company shall consist of one million of shares of one hundred dollars each, which shall be subscribed for and held in not more than two thousand shares by any one person."

Mr. Robinson now moved that it be laid upon the table. The Chair said it was not in order and would be laid upon the table. The business now in order was the consideration of the resolutions before the convention when it adjourned. The amendment pending was to strike out first of October and insert first of November. Mr. Ryan moved to strike out all that followed the order to open the books. Mr. McPherson claimed that his motion had precedence. Gov. Evans asked to have read the resolution and what would be stricken out. Mr. Ryan would strike out all that followed the order for opening the books. Mr. Bushnell thought the resolution of Mr. Ryan should be considered as a substitute for the motion of Mr. McPherson. Mr. Ryan moved as a substitute, that all should be stricken out of the resolution that related to the time for keeping the books open. Judge Marsh arose to say the proposition of Mr. McPherson was a straight forward and legitimate one and should be voted on. Mr. Tilden asked Mr. McPherson's object in making the resolution. Mr. McPherson then stated there was only thirty days now to the time of opening the books. It was now a time when the telegraph announced the Capital beleaguered and Cincinnati threatened. People were sending regiments to the war. He expected to go home and engage in organizing to defend the country. There was enough to do the next thirty days to hurl back this atrocious rebellion. He believed it could be done in 60 days. Dr. Wozencraft subscribed in full to the patriotic sentiments. He thought the present exactly the time to obtain the subscriptions to the great overland line which was to bind the country together. Our work was not less than that of the Army in the field. The question was put and the amendment of Mr. McPherson adopted. Mr. Ryan then called up his resolution to strike out all that referred to keeping open the books any particular length of time. Question was taken and the resolution appearing to be lost, Mr. Ryan called for a division. He wished to say a word before the vote was taken. He should regard this vote as an index as to whether the city of New York intended to control the stock of this company. Mr. Tilden deprecated the strain of Mr. Ryan's remarks. Mr. Tilden moved that the resolution be amended so as to make it read, that the books should remain open till the amount of stock required to organize the company be subscribed and then closed. The Chair suggested that it would be well to have a day fixed for closing of the books, that it could be known at a fixed time what stock was taken, what money paid in, and what money to be accounted for. Mr. Cass arose to say that the act was imperfect in this respect. It provided that the books should be opened but not that they should be closed. It

seemed to him that the books should be opened by the corporators, and kept open till the directors directed them closed on the subscription of the whole stock. Mr. Ryan stated that the arguments made convinced him of the necessity of his resolution.

Gov. Dennison, of Ohio, said it seemed to him a necessity either to reduce the number of places for opening the books or leave the resolution as it is. The question was taken on Mr. Ryan's resolution. Judge Marsh asked if he understood the resolution to mean that the books be opened on the first Wednesday of Nov. and be kept open at least two weeks. Gov. Dennison understood it to mean that the books should be open two weeks and then ordered closed by the officers, to enable the executive officers to perform their duty under the law. Judge Marsh perceived a difficulty in ordering the books kept open only two weeks. If the amount of stock were not subscribed it might be desirable to keep them open longer. Question was called and taken. Division called for. Vote largely against the resolution. The Chair suggested that as permission was given to the executive officers not to open the books in certain places, whether it would not be better to give them also permission to close the books, which was already done. The resolution was then read.

Resolved, 8. That the Commissioners will duly proceed to open books for subscriptions to the stock of the Union Pacific Railroad Company, in the manner and on the terms prescribed in the act of incorporation. That said books be opened on the first Wednesday of November next, at 12 o'clock at noon, in Portland, Maine; Concord, New Hampshire; Rutland, Vermont; Boston Massachusetts; Providence, Rhode Island; Hartford, Connecticut; New York City; Trenton, New Jersey; Philadelphia City; Wilmington, Delaware; Baltimore, Maryland; Washington City; Columbus, Ohio; Indianapolis, Indiana; Chicago, Illinois; Detroit, Michigan; Milwaukee, Wisconsin; St. Paul, Minnesota; Burlington, Iowa; St. Louis, Missouri; Leavenworth, Kansas; Omaha, Nebraska; Denver City, Colorado; Salt Lake City, Utah; Cleveland and Cincinnati, Ohio; Buffalo and Albany, New York; Wheeling, Virginia; Louisville, Kentucky; Pittsburgh, Pennsylvania; Portland, Oregon; Dubuque, Iowa; Denver City, Nevada; to be opened in such localities therein as may be designated by or under authority of the President, Secretary, and Treasurer of this Board, or any two of them, and by such persons as they may in like manner appoint. That said books shall remain open at all said places at least two weeks; but if, in the judgment of the President, Secretary, and Treasurer, or any two of them, it shall prove impracticable to open or keep open the said books at any or either of the said places, such places shall be dispensed with.

A cash payment of ten per cent. on the amount of every subscription shall be made by a certificate of deposit to the credit of the Treasurer in some bank of good standing to be approved by him; and, on receiving such certificate, he shall issue his receipt to the subscriber for the amount.

Resolved, That the security to be given by the Treasurer shall be responsible only for due care in the safe keeping of the moneys which shall actually come to his hands; he shall keep on interest any funds which may accumulate in his hands, at the highest rates consistent with safety.

Judge Marsh moved that a clause ordering the books to be kept open in New York be inserted. After discussion Mr. Tilden moved as a substitute that the books shall remain open in New York, Philadelphia and Boston until the amount required to complete the organization be obtained. Gov. Dennison thought it would be necessary to keep the books open in one of two principal places until the directors

are elected, and they could be turned over to the new Board as the subscription books of the incorporators. He suggested Albany or Chicago. Mr. Tilden supposed the election would be held where it would most accommodate the subscribers. As the resolution was first read it met Gov. Dennison's views. Judge Marsh withdrew his motion and moved to restore the resolution as it was originally made. The next resolution was read as follows:

Resolved, 9, That a committee, consisting of five members be appointed by — to collect useful information in respect to the contemplated Pacific Railroad, the various routes proposed and the agricultural, mineral, and topographical character of the regions traveled by such routes; and that all the members of this Board be requested to transmit to the said committee such information as they may possess or acquire on these subjects.

Dr. Wozencraft rose to suggest that as the minimum amount of money to be received was \$200,000 the amount of security on the bond be increased from \$100,000 to \$200,000. After explanation by Mr. Tilden, Dr. Wozencraft withdrew his motion. The ninth resolution was carried.

The next resolution was read by Mr. Cass:

Resolved, 10, That the Treasurer is authorized and directed to pay the warrants drawn on him by the President and countersigned by the Secretary, which warrants shall only be drawn for the legitimate expenses of the organization, which occur subsequent to the time of the meeting of the Commissioners; but no expenses incurred prior to date shall be paid, excepting for the advertising required by the act of incorporation.

Resolved, 11, That the Advisory Committee of thirteen be a Committee on Expenditures and Accounts; and no warrant shall be drawn for any account until approved by said committee; and it shall be the duty of said committee to audit the final account of the Treasurer.

Resolved, 12, That it shall be the duty of the Secretary to keep an account of all warrants drawn on the Treasurer by the President, and countersigned by him; showing the date, purpose for which drawn, and amount of said warrant; he shall also file in his office the original bill or voucher, receipted, for which the warrants were drawn.

Mr. McPherson suggested that the warrants be for sums of not less than fifty dollars.

The alteration was accepted.

The next resolution was read by Mr. Ruggles:

Resolved, 13, That it be referred to a committee of three members from New York, to be appointed by the President to petition the Land Board of New York to exempt from canal tolls all the railroad iron carried on the canals of that State to be used in the construction of the Union Pacific Railroad.

The resolution was passed.

Mr. Evans then moved the adoption of resolution No. 14, as follows:

Resolved, That the development of prosperous settlements in Colorado, Utah, and Nevada Territories, on the direct east and west line between New York and San Francisco, has furnished one of the greatest desiderata to the construction and maintenance of the Pacific Railroad, and encourages us in our efforts.

The motion was seconded and passed.

Next resolution when Board adjourn, it adjourn subject to call.

Carried.

Judge Marsh asked if it was not necessary that some action be had by the Board as to how these books be opened. The chair decided that the resolutions already provided the books be opened under the authority of the Secretary and Treasurer and by such persons as they may appoint. Mr. Robinson, of California, called up his resolution. Read by the Secreta-

ry. That the President is instructed to petition Congress, &c.

Question taken. Carried.

Gov. Evans then moved that the communication from the Territory of Colorado, including the survey, be placed on file.

Carried.

On motion of Mr. Tilden the blank in resolution was filled by inserting 5.

Dr. Wozencraft offered the following resolution:

Resolved, That the President of the United States be requested to make a requisition on the Governor of Utah to use his good offices with the Indians on the line of the proposed railroad to induce them to remain at peace with the whites.

He stated that the resolution was submitted not merely as the expression of his own wish, but at the request of the Secretary of the Interior.

Mr. Ruggles thought we should be very cautious what we did with Utah except to ask for information.

In further illustration of the facilities of receiving information from Utah,—a topic on which he had commented the preceding day,—he read the following telegram:

TELEGRAM NO. 1.

CHICAGO, Sept. 4—11 o'clock 10 minutes, A. M. President BRIGHAM YOUNG, Salt Lake.

The Pacific Railroad Convention is now in session in this city. What time last evening did you receive yesterday's proceedings of convention.

E. CREIGHTON.

TELEGRAM NO. 2.

E. CREIGHTON: President Young is not in the city. Can't get answer to message. SALT LAKE OFFICE.

TELEGRAM NO. 3.

CHICAGO, Sept. 4, 1862.

Salt Lake Office: Get Wells, Carrington or Kimball to answer. E. CREIGHTON.

TELEGRAM NO. 4.

E. CREIGHTON: President Young is on a visit to Cotton Country, and will not return for a month. Will see Wells or Carrington. SALT LAKE OFFICE.

TELEGRAM NO. 5.

CHICAGO, Sept. 4, 1862.

Salt Lake Office: Get answer quick. E. CREIGHTON.

TELEGRAM NO. 6.

SEPT. 4, 1862.

E. CREIGHTON: They are writing a reply, being particular on account of President Young's absence.

SALT LAKE OFFICE.

TELEGRAM NO. 7.

E. CREIGHTON, Chicago: President Young being absent, we take pleasure in informing you that the telegraph reports of the proceedings of the Pacific Railroad Convention, now in session in Chicago, are perused here with deep interest. We trust that the Pacific Railroad may be located on the route that will bring the greatest good to the greatest number, and that the work may be speedily accomplished. Utah will doubtless, when opportunity offers, add deeds to words in so great and useful an enterprise.

HEBER C. KIMBALL,
DANIEL H. WELLS.

Great Salt Lake City, 11:50 A. M., Sept. 4.

The reading of the documents was received with applause.

Mr. Wozencraft thought these people would render great assistance to the road, if the resolution he wished to have passed were to pass. He thought they could make that part of the line easily, as they had great facilities, and he believed they would complete the middle part of the line before the remainder was completed.

Mr. Tilden wished to say that it was partic-

ularly requested that those gentlemen who had communicated so much information to the convention be requested to communicate it to the committee by writing.

Dr. Wozencraft explained his resolution.

On motion of Mr. Gilmore the motion was laid on the table.

Mr. Cass asked whether it was necessary to take action on his resolution that the auditory committee consist of five members of the advisory committee exclusive of the officers. Acquiesced in by general consent.

Mr. Campbell, of New York, asked if the Board had passed a resolution of acceptance of the terms of the act.

Mr. Smith, of Iowa, moved that the President and Secretary be authorized to notify the Secretary of the interior of the acceptance of the charter.

Gov. Dennison offered the following resolution:

Resolved, That a certified copy of the proceedings of this convention, including all the proceedings of the board of Commissioners including the notice issued by the commissioners for the State of Illinois, be prepared and signed by the President and Secretary and forwarded to the Secretary of the Interior, to be filed in his Department.

Mr. Smith said that might be considered an acceptance, but would not be an acceptance as contemplated in the law. Mr. Hammond preferred to file with the Secretary of the Interior a certified copy of the proceedings of this convention, and, as we had a year in which to accept the charter on the final organization, we could accept the act under seal. Gov. Dennison accepted the amendment. The resolution was then adopted. Mr. Bushnell asked if it was necessary to adopt a seal. Mr. Smith, of Iowa, moved that the President and Secretary be authorized to provide a seal. Mr. Tilden begged to read from the law Section 14. Mr. Monell of Nebraska offered the following resolution:

Resolved, That the newspaper press throughout the loyal States be respectfully requested to publish the proceedings of this convention, for the purpose of aiding on the success of this great enterprise of a Pacific Railroad.

Resolved, That the officers of the Board of Commissioners be instructed to publish in pamphlet form, for general distribution, copies of the proceedings of the convention, with such other matters as may, in their judgment, promote subscriptions to the capital stock.

Mr. Thompson suggested that, as the proceedings of the meeting would be widely circulated and there were some expressions derogatory to England, it might be well to modify them. Mr. Ruggles explained that there was nothing of the kind in the resolutions, and that he had made no imputations upon the people or the government, but merely upon that portion who wished for the dismemberment of this country.

Mr. Thompson hoped he included the London Times in that list.

Mr. Ruggles—No, I will not condescend to speak of the Times.

Gov. Dennison offered the following resolution:

Resolved, That the thanks of the Board of Commissioners of the Union Pacific Railroad Company are hereby tendered to the Hon. Wm. B. Ogden, President of the Board, for the dignified, able and courteous manner in which he has presided over their deliberations at this first meeting, so important to the interests of the country.

Mr. Ogden acknowledged the honor in a few words. Mr. Tilden proposed three cheers for Gov. Dennison who briefly acknowledged the honor. Mr. Robinson of California moved that the thanks of the convention be tendered to all the Presidents of the railroads and the

Superintendent of the Illinois and Michigan Canal and to the citizens of Chicago for their hospitalities. Carried. The question was then taken on the resolution of Dr. Monell and carried. Mr. Bloodgood rose to ask whether this board fixed the number of directors. It was replied that would be determined by the stockholders at their meeting. Mr. Wood moved a vote of thanks to Senator McDougal amended to include all members of Congress who took an active part in pushing forward the bill to aid in the construction of a railroad telegraph line from the Missouri to the Pacific Ocean. Carried.

Mr. Bushnell, of Connecticut, said he came from New England, and wished to say to Western gentlemen that he should carry back to New England the assurance that the live men of the West are in earnest in this work, and that it is bound to go through. He moved that the convention adjourn *sine die*.

The president said he hoped that every commissioner would see that when the subscription books were opened in their respective States that good returns were made.

The convention then adjourned *sine die*.

NEW HAVEN AND NORTHAMPTON RAILROAD CO.

The New Haven & Northampton Company, Farmington Valley Railroad Company, and the Hampshire & Hampden Railroad Corporation, were, by acts of the Legislatures of the States of Massachusetts and Connecticut, and by contracts of the Directors of said Companies and Corporation, approved by the Stockholders, merged in one Company, on and after July 1st, 1862, under the name of the New Haven & Northampton Company. Thus the entire road from New Haven to Northampton is now owned and controlled by one Corporation, subject of course, between Granby and New Haven, to the lease to the New York & New Haven Railroad Co., which lease expires by limitation, June 30th, 1869. The length of line thus consolidated is 76.37 miles with branches 8.76. It is all single track road. The capital stock of the organization is \$1,010,000. The first mortgage on the New Haven and Northampton Railroad Co., is \$4,500, at 7 per cent interest. The first mortgage on the Hampshire & Hampden Railroad is \$200,000, bearing interest at 6 per cent. The second mortgage on the Hampshire and Hampden Railroad is \$103,014 bearing interest at 6 per cent. There is no floating debt and no other bonds. The road is therefore liable as follows:

LIABILITIES.

Capital Stock.....	\$1,010,000
1st Mortgage N. H. & N. R. R.....	450,000
1st " H. & H. R. R.....	200,000
2nd " ".....	103,014
Total Liabilities.....	\$1,763,004

This amounts to about \$23,000 per mile of road. The company heretofore has earned about 6 per cent on its whole liabilities and has made dividends of from 3 to 5 per cent on its capital stock, applying the balance to the payments of its bonds. Under the consolidation the bonds of the Hampshire and Hampden R. R. Co. were assumed by the New Haven & Northampton Railroad Company.

They are secured by mortgage on 25 miles of Railroad in Massachusetts.

As the road between New Haven and Granby is under lease to the New York & New Haven Railroad Company no details of its operation during the past year are given. The doings of the year on the Hampshire & Hampden R. R., as given in the State Report of the Directors are as follows:

DOINGS DURING THE YEAR.

Miles run by passenger trains.....	31,994
Miles run by freight trains.....	18,642
Miles run by other trains.....	1,580
Number of passengers carried in the cars.....	29,079
Number of passengers carried one mile.....	331,257
Number of tons of merchandise carried in the cars.....	18,310
Number of tons of merchandise carried one mile.....	326,382
Number of passengers carried one mile, to and from other roads.....	110,155
Number of tons carried one mile, to and from other roads.....	238,977
Rate of speed adopted for express passenger trains, including stops 26 miles per hour.....	
Average rate of speed actually attained by express passenger trains, including stops and detentions, 26 miles per hour.....	
Rate of speed adopted for accommodation trains, 16 miles per hour.....	
Rate of speed actually attained by accommodation trains, including stops and detentions, 16 miles per hour.....	
Average rate of speed adopted for freight trains, including stops, 16 miles per hour.....	
Cost of Fuel per mile run.....	06 82
" Oil and Waste per mile run.....	00 98
" Repairs of Engines, per mile run.....	01 73
Feet of Wood used.....	2 39
Total cost of Operating Road " in length, per year.....	972.53

The following are the officers of the consolidated company for the ensuing year:

Wm. Johnson, *Pres. and Treas.*, N. Haven, Ct.

Chas. N. Yeamans, *General Agent and Supt.*, Westfield, Mass.

A. L. Kidston, *Sec'y*, New Haven, Ct.

Directors.—Wm. Johnson, Jos. E. Sheffield, A. L. Kidston, Wm. W. Boardman, John Bradley, Stephen D. Pardee, M. G. Elliott, Chas. Dickerman, Wells Southworth, all of New Haven, Ct.

Executive and Financial Directors.—Wm. Johnson, Jos. E. Sheffield, and A. L. Kidston.

STEEP GRADES AND LOCOMOTIVES.

(Continued.)

Coming now to your mountain division: I do not consider that it would be safe to attempt to carry up 110 tons at 20 miles an hour with an engine weighing less than 30 tons in running order, or, with its tender, 45 tons. Thus we at once have a total load of 155 tons, which on a 96 ft. grade, presents a gravity of 6,313 lbs. Taking the other resistances as no more than 13 lb. per ton, we have 8,328 lb. to overcome at 1,760 ft. per minute, thus requiring 444 horse power. To exert a tractive force of 8,328 lb, an engine should have at least five times that weight, or 18½ tons on its coupled driving wheels. And as we can not count upon the maintenance (unless with a very large boiler) of more than 75 lb. average effective pressure per square inch upon the pistons throughout their whole stroke (the boiler pressure being, say, 120 lb.), we shall find that 17 in. cylinders, 24 in. stroke, and 5 ft. 2 in. wheels will give off 8,390 lb of steam tractive force, which is only a very little more than is

required. So, again, to exert 444 horse power will require the evaporation of not less than 1,400 gallons of water per hour, showing that the boiler must also be large.

I have decided, therefore, upon an outside cylinder engine with 17 in. cylinders, 24 in. stroke, four coupled driving wheels, 5 ft. 2 in. in diameter, and truck of four 30 in. wheels. The boiler to be 48 in. in diameter inside, and to contain 172 brass tubes, 22 in. in diameter and 11 ft. and 9 in. long, giving 1,058 square feet of external surface. The fire box surface will be about 87 square feet, and the area of grate 16 square feet. The drawing wheels will be spread 8 ft. from center to center, and the truck wheels 5 ft. 6 in. from center to center, the whole distance from the center of the back driving wheels to the center of the pintle of the truck being 18 feet 9 in., and the whole length of wheel base 21 ft. 6 in. Both pairs of driving wheels to be flanged. I presume you will have no apprehension that these lengths will be too great for your 739 ft. curves. The following roads run engines of equal and often of greater length through the curves stated:

	Shortest radius of curves.
N. Y. and Erie, 6 ft. gauge.....	799 feet.
New York and New Haven, 4 feet 8½ in.....	573
Hartford and New Haven, do.....	444
Hartford, Prov. and Fishkill, do.....	604
Boston and Worcester, do.....	610
Naugatuck, do.....	610
Danbury and Norwalk, do.....	572
Western (Mass.) do.....	855
Canandaigua & Elmira, 6 ft. gauge.....	631
New York Central, 4 ft. 8½ in.....	710
Watertown and Rome, do.....	816
Albany Northern, do.....	610
Reusselaer and Saratoga, do.....	416
Saratoga and Schenectady, do.....	500
Penna. Central (Mountain division).....	637
Penna. Cen. & Philadelphia & Columbia,.....	637

"The Baltimore and Ohio engines different from these of the above roads, run through innumerable curves of 600 feet, and the Reading Railroad engines through curves of 700 ft. the passenger engines running into the new station in Philadelphia through a curve of only 280 ft. radius laid down in Broad street. The Virginia & Tennessee Railroad, 5 ft. gauge, has, I believe, 13.7 miles of curves not greater than 955 ft. radius, and of this distance 3 miles have no more than 819 feet radius, and ¼ mile only 717 ft. radius. Yet the last engines built in Paterson for the Virginia and Tennessee Railroad have all flanged drivers spread 8 ft. 6 in. from center to center, and with a wheel base of quite 21 ft. 5 in. The New York and Erie (6 ft. gauge) engines run daily through 788 ft. curves, many of the freight engines having six coupled drivers and truck, the extreme drivers 11 feet from center to center, and the whole wheel base 23 ft. This is, of course, far more trying than a curve of 739 feet, with such engines as I propose, on a 5 ft. 3 in. gauge.

In the design of the engine I have introduced no untried novelties of any kind, nor anything which, although in occasional use, has not yet established its character for reliability and real advantage. The general design is much like the Rogers engine, only I adopt the deep slab frame of the English builders, and fasten my cylinders with perhaps unusual care to a

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	64	48	\$ 13,111,800	10,781,833	500,07	3,022,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
Baltimore and Ohio.....	Md.		380							"	2,500,000	6	95	1825	
do do										"	700,000	6	84	1880	
do do										"	1,125,500	6	90	1875	
do do										"	1,000,000	6		1867	
do Washington Branch.....	Md.		30	1,650,000						"	791,000	7	55	1868	
Bellefontaine and Indiana.....	Ohio & Ind.	118		1,850,813	1,256,750	139,120	314,090	8,795	Dec. 1860.	1st Mortgage.....	160,000	7		1870	
do do										2d "					
Buffalo and State Line.....	N.Y. & Pa.	129	64	1,950,950	1,049,000	27,540	911,019	499,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	132	95	3,798,400	8,280,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	307,000	6	100	1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7	62	1861	
do do										1st "	800,000	7	80	1864	
do do										2d "	800,000	7	64	1865	
do do										3d " S. F.	950,000	7		1825	
do do										4th " S. F.	1,367,800	7		1876	
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,395	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d "	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7			
do do										2d "	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						3d "	1,000,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,297,750	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	1st Mortgage.....	200,000				
do do										2d "					
Chicago and Rock Island.....	Ills.	69	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	1,250,000	7	80	Feb & Aug.	
Chicago, Burlington and Quincy.....	"	86	138	4,689,340	4,814,515		1,514,428	761,830		Gen'l 1st Mortgage.	3,600,000	7	52	Feb. & Aug.	
do do										2d "	2,000,000	6	26	May 1.	
do do										1st Mortgage.....	2,000,000	7	105	1870	
do do										Cons. 1st Mort. S. F.	2,172,000	8	110	1893	
do do										" 2d " S. F.	813,000	8	108	1890	
do do										1st Mort. Chi. & Aur.	399,000	7		1867	
do do										2d "	303,090	7		1869	
do do										1st " Cent. Mil. Tract	392,000	7		1864	
do do										2d "	245,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
Cincinnati, Hamilton and Dayton.....	Ohio.	99	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	950,000	7	100	1880	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
Cleveland and Mahoning	Ohio.	68		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,509				
do do										1st Mortgage.....	850,000		80		
do do										2d "	499,000	7			
do do										3d "	344,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	25	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1880	
do do										2d " M. L. or 1st Ex.	1,185,000	7	96	1873	
do do										3d 2d Ex.	1,165,000	7	81	1865	
do do										4th 3d Ex.	1,154,000	7	64		
Cleveland and Toledo.....	Ohio.	53	148	3,343,800	3,850,570	196,413	919,973	493,956	May 31, 1861.	1st Mort. Jun. 1st Div.	359,000			1867	
do do										1st " 2d Div.	263,000	7		1872	
do do										2d "	265,000	7		1862	
do do										1st " Tol. Nor. & Cleve	521,000	7		1863	
do do										2d "	293,300	7		1864	
do do										Junction Income..	41,509	7		1862	
do do										C. & T. Income.....	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	121	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000			1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	125	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	99	1861	
do do										2d "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	105	54	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700		92	1860 to 1866	
Columbus, Piqua and Indiana	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666						2d "	2,212,000	8			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,035	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	50		
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000	7	90	1875	
do do										2d "	1,000,900	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	738,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		966,061	1,219,100	249,868	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.											
Galena and Chicago Union.....	Ills.	73	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	400,000				
do do										2d "	180,000				
Great Western	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage.....	1,993,000		104	1862 & 1863	
do do										2d "	1,520,900		100	May 1, 1875	
Green Bay, Milwaukee and Chicago...	Wis.	64		400,000	No report	75,000	63,141	13,573		1st Mortgage W. D.	1,041,000	10			
Greenville and Miami.....	Ohio.	32		300,000	473,000					1st " E. D.	1,350,000	7			
Hannibal and St. Joseph.....	Mo.	206		1,041,086	10,554,000	220,336	996,907	512,933	Sept. 1, 1860.	Land Mortgage...	5,000,000		26		
do do										Mortgage Conv.....	1,354,000		45		
Hartford and New Haven	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	927,000	6	30	1873	
Hudson River.....	N. Y.	51	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	110	1869 & 1870	
do do										2d S. F.	2,000,000	7	106	1880	
do do										3d "	1,840,000	7	104	1875	
Illinois Central.....	Ills.	63	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	28,000	7	100	1868	
do do										Construction.....	12,885,000	7	100	1875	
do do										"	4,115,000	6	97	1875	
do do										Debentures.....	42,740	7	96		
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000	7			
do do										2d "	578,000	10			
do do										Income.....	38,700	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000	7		1866	
do do										2d "	400,000	7	85		
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort.....	200,000	7	85		
do do										1st Mortgage.....	649,984				
Iowa Central Air Line.....	Iowa.			245,000	755,000	No report	No report			2d "	314,000				
Iron.....	Ohio.	13		118,865	50,000	No report	No report								

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	
Iron Mountain.....	Mo.		86½	\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	132,797	Dec. 31, 1860.	1st	249,000	7	75	1861	
do										2d	392,000	7	70	1873	
Kentucky Central (Covington and Lexington).....	Ky.		99	Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st	260,000	7			
do										2d " Conv.	1,000,000	7			
do										3d	600,000	7			
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiver.						1st Mortgage E. D.	903,000		89		
do										2d " E. D.	1,000,000				
do										1st Land Grant W D	4,000,000		21		
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report		June 30, 1861	1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.		29	514,433	130,000		103,914	43,267	Jan. 1, 1862	1st Mortgage.....	1,300,000	6		1863	
Little Miami.....	Ohio.	108	65				1,330,050	529,981	June 30, 1861	City Loan	174,000				
Louisville and Frankfort.....	Ky.		65	1,169,59	384,519		245,910	93,679		1st Mortgage.....	218,000				
do										1st Mortgage.....	2,000,000	7			
Louisville and Nashville.....	Ky.		268	5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.		288	2,500,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.		87	1,648,050	1,285,300	87,989	230,563	99,080	Dec. 31, 1860.	1st Mortgage	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.		203	8,561,213	196,468	108,150	433,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868	
do										2d	2,000,000	7			
do										3d	1,500,000	7			
do										Sterling Income.....	333,000	4			
Michigan Central.....	Mich.		68½	284	6,057,784	7,968,489	125,000	2,126,699	May 31, 1861	Domestic	928,617	6	94½	1872	
do										1st Mortgage Sterling	467,483	8	84	1869	
do										1st " Conv.	500,000	8	90	1860	
do										1st " unconv.	250,000	8	106	1869	
do										1st " Dollar Conv.	2,598,000	8	108	1862	
Michigan South'n & North'n Indiana	Mich.&		31½	246	9,018,200	9,714,704	437,886	2,075,459	Mar. 31, 1861.	1st " S. F. Conv.	4,153,000	8	99	1860	
do										Mort. Mich. S.	991,000		103	1861	
do										" Nor. Ind.	985,000		100	1868	
do										" Goshen Line.	1,168,600		101	1865	
do										S. F. Toledo	2,850,000		101	1885	
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182		2d Mortgage	2,465,000	8	89	1877	
do										1st Mortgage.....	400,000	8			
Milwaukee and Horicon.....	Wis.		42	1,101,200						2d	200,000	7			
do										1st Mortgage.....	420,000	8			
Milwaukee and Prairie du Chien.....	Wis.	34	192	4,944,000	2,556,000		683,186	439,943	Dec. 31, 1860.	2d	600,000	7		1891	
Milwaukee and Western.....	Wis.		71	No report						1st Mortgage.....	2,556,000	8			
Mississippi and Missouri.....	Iowa.		55	No report						1st Mortgage Conv.	1,000,000	7	96		
do										2d " S. F.	400,000	7			
do										Oskaloosa Div.	1,425,000	8			
do										Land Grant.....	7,000,000	7			
New Jersey.....	N. J.		34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000		102½		
New Jersey Central.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.						
New York and Erie Pref.....	N. Y.		68½	Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860	1st Mortgage.....	3,000,000		110		
do			38½							2d	4,000,000		110		
do										3d	600,000		104		
do										4th	4,900,000		93		
do										5th	1,792,500		82½		
New York and Harlem Pref	Conn.		40½	138	5,717,190	6,055,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	105½	1873
do common										2d	1,000,000	7	101	1864	
New York and New Haven.....	Conn.		16		3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7	94	Dec. 1, 1866
do															
New York Central.....	N. Y.		93½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.	7,925,000	6	101	Oct. 1, 1875
do										Mortgage.....	3,000,000	6	103	June 15, 1864	
Northern Central.....	Md.		138		2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,086,500	6		1885
North Missouri.....	Mo.				2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6		
Ohio and Mississippi, Eastern Div....	Ohio & Ind		192		Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6		
do										3d	316,985				
do										Construction.....	4,637,920				
do										Income.....	3,591,185				
Ohio and Mississippi, Western Div....	Ills.		148			3,292,403	No report			State Loan.....	7,000,000				
Pacific	Mo.				3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W.	2,800,000	6		
do										Construction.....	4,500,000	6			
Pennsylvania.....	Pa.		359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,900,000	6	104½	1888
do										2d	2,319,000	6	98½	1875	
do										2d " Sterling.	1,957,440	6		1875	
do										State Works.....	7,200,000	5	89		
Peru and Indianapolis.....	Ind.		74		1,100,000	820,000	80,000	No report		1st Mortgage	2,300,000	6	99½	1864	
Philadelphia, Wil. and Baltimore.....	Del.		98		5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863
do										1st Mort. O. & P.	1,000,000	7	96	1865	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		467		Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	2d	750,000	7	83	1860
do										1st " O. & I.	1,000,000	7		1872	
do										2d "	380,000	7		1873	
Pittsburgh and Connellsville.....	Pa.		49		1,755,826	1,292,700	67,869	80,533	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000			
Racine and Mississippi.....	Wis.		104		2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.					
do															
Sandusky, Dayton and Cincinnati. .	Ohio.		170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856
do														1866	
Sandusky, Mansfield and Newark....	Ohio.		125		848,770	1,285,200	132,063	185,934	34,167	Dec. 31, 1860.	"	1,000,000	7		1875
do			56		407,975	500,000	100,000	110,300	53,100		1st Mortgage.....	1,290,000	7		1886
Springfield, Mt. Vernon & Pittsburgh..	Ohio.		50		1,000,000	1,050,000	200,000								
do										1st Mortgage.....	500,000				
do										2d	450,000				
Stuebenville and Indiana..	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d	900,000	7		1865	
Terre Haute, Alton and St. Louis.....	Ills.		206		No report					1st Mortgage Conv.	1,000,000	7	110	1862	
do										2d " Conv.	2,000,000	7	92	1868 & 1870	
do										1st " Bel. & Ill.	517,000	7		1873	
Terre Haute and Richmond.....	Ind.		73		1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	92	1866
do			243		2,123,506	5,996,048	52,389	333,545		1st Mortgage.....	3,400,000	7	92	Aug. 1, 1865	
do										2d	2,500,000	7	70	Nov. 1, 1878	
do										Mort. Coupons.....	96,049	7		1860 to 1868	

cast iron bed plate on a plan which I employed with success for some very large engines built by the New Jersey Locomotive and Machine Company for the Delaware, Lackawanna, and Western Railroad. I adopt the link motion, full stroke pump with air vessels, or Gifford's injector, which I believe to be still better. I use the center bearing truck, as made by Rogers, only strengthening it somewhat. The general running gear is of the ordinary American plan. Messrs. — will propose for the engines both with cast and with wrought iron driving wheels, and I shall recommend either Whitney's or Bush and Lobdell's chilled wheels for the trucks and tenders, supposing there to be sufficient time to order and procure them from America. I prefer these wheels to small wrought iron tyred wheels. Throughout my design I have provided liberal bearing surfaces, a very easy suspension on the springs, deep oil cellars to the main journals, and unquestionable strength and thoroughness of construction everywhere. I take it that your gauge is exactly 5 ft. 3 in. on straight lines, and slightly widened on curves, say, to 5 ft. 3½ in. Also that you speak of tons of 2,240 lb. and not of 2,000 lb. I presume also that you burn wood, as is to be done on the San Paulo line, and that the water for the engines will be fair quality.

English built engines are generally costly in consequence of having very heavy boilers, very heavy copper fireboxes, wrought iron wheels throughout, often copper steam pipes, brass pistons, and other expensive materials. But for an engine of like construction, it ought unquestionably to be built cheaper here than in America, as iron is one-third cheaper, and mechanics' wages are about one-third less also."

Subsequently Mr. Colburn again addressed Major Ellison regarding the freight engines, as below.

Your requirements with regard to the duty of the passenger engines were so fully stated, that I had no difficulty in determining their proper size and weight. As for the freight engines, however, it was stipulated only that they should be of "first rate power," and be capable of working your mountain grades at 12 miles an hour. Different engineers and locomotive builders would, no doubt, construe this requirement differently, and while some would consider that a 28 ton engine would be of "first rate power," others might not be satisfied with less than 36 tons. But as the duty you require of your passenger engines is unquestionably large, I am led to believe that you anticipate, also, a heavy freight traffic. For a 15 mile grade, averaging 88 ft. per mile (1 in 60) all the way up, I think you would sooner have occasion for regretting the choice of too light than of too heavy engines. I am aware also that you have in your mind the class of engines employed in working the heavy grades of the Baltimore & Ohio, Pennsylvania Central, Virginia and Tennessee, and

other roads in the United (and I must add the Confederate) States. Your mountain section so far resembles that of each of the roads named, that it might be supposed that what answered best for them would also do for you. There are one or two roads also—the Mine Hill and Schuylkill Haven, with 8 miles of 90 ft. grade, and the Delaware, Lackawanna and Western, with several miles of 75 ft. grade—which are worked with much the same kind of engines as those employed on the first two of the lines above named. Few, however, if any, of the long and heavy grades on these roads are worked at so high a speed as 12 miles an hour for freight trains. Unless the engines go up with two-thirds of a train, the speed can not be kept up at more than 8 miles an hour, and this low rate of speed is that now adopted with the same kind of engines, running heavy coal trains, on the nearly level grades of the Reading Railroad, the time from Pottsville to Port Richmond—95 miles—being from 13 to 14 hours, including stops—12 hours being the regular running time. If, now, you have decided upon 12 miles an hour as the regular speed of freight trains, both from the Parahyba river and from Belem, up to the summit tunnel, I do not doubt that you also expect these trains to be as heavy as on any similar grades in the States. Your heaviest traffic, I must suppose, will be up the western slope, on which, altho' the grade averages but 25 ft. per mile, it rises for, in all, 3½ miles at the rate of 68½ feet per mile (1 in 77.) Here, you will probably require to take up as a maximum gross load (cars and freight) 300 tons, and in returning from Belem the same cars—with whatever return freight they may bring—will be likely to weigh from 200 tons to 225 tons; and thus, taking the difference of grades into account, the engines would be worked up to about the same power on both sides of the tunnel. If your freight cars have continuous draw rods, so that no car in a train—no matter how long that train may be—is strained beyond what is due to its own weight and load, you will, I have no doubt, wish to avail yourself of the advantages of running heavy trains, dividing your loads as little as possible, so as not to keep two engines at work where one would answer, at hardly more than two-thirds of their total expense. The Western Railroad of Massachusetts is the only American road I know of on which light freight engines and, consequently, light trains are worked over long 75 ft. grades; and a reference to the reports of that corporation will enable any one to decide how unprofitable the system is, even when kept up in a long line of railroad, over which the cheapest freight pays 2½ cents per ton per mile.

(To be continued.)

The New York and Cumberland Railroad has recently changed hands, passing into the hands of the old Trustees, according to a decision of the court.

LIABILITY OF RAILROAD COMPANIES FOR FREIGHT.

A decision of great importance to railroad companies, as common carriers of freight, has recently been made in the Supreme Court of New York, at its General Term. We find the report of the case in the *Railroad Journal*. It settles the point that railroad companies are not liable for freight which is taken from their possession by due process of law. The following is the decision:

The case of *Bliven et al vs. the Hudson River Railroad Company* was recently decided at a General term of the New York Supreme Court; and it holds that if goods are taken from the bailee by authority of the law exercised through regular and valid proceedings, it will be a defence to an action by the bailor, against him; and that this general rule as to bailees applies also to the case of common carriers, or railroad companies.

The action was brought against the defendants to recover the value of goods delivered to them to be transported from Sing Sing to New York and alleged to have been lost through their negligence.

It appears that on the 2d of September, 1859, the plaintiffs delivered to the defendants at Sing Sing twenty-nine cases or boxes of merchandise, containing saw-plates and saw-handles of the value of \$4,338 £2, for the purpose of having it transported to New York, under an agreement or contract in writing, a copy of which was set forth in the plaintiff's complaint. The boxes of merchandise, after being received by the defendants, were placed in their freight cars, for the purpose of being transported to New York. Before the regular hour for the departure of the train in which the cars containing the merchandise were to go to New York, a complaint was made on oath by one James L. Cheesman to Joakin Urmy, a justice of the peace for the town of Ossining, alleging in substance that the said property belonged to the Eagle Saw Manufacturing Company, and had been stolen or embezzled or by one Charles Bliven. The magistrate thereupon issued a warrant to search for the property and deliver it to a constable of the town of Ossining for service and execution. Under and by virtue of this warrant the constable forcibly opened the cars in which the merchandise were locked and took the same into his possession. By the direction of the justice the constable took the merchandise to the premises of the Eagle Saw Manufacturing Company in the town of Ossining, and the magistrate there delivered to Cheesman who claimed at the time to be Secretary of that company.

The plaintiff claimed a right to the property under the following circumstances: The plaintiffs, by an article of agreement made between them and the Eagle Saw Manufacturing Company, were to make advances to the company and sell their manufactured articles upon certain terms provided for in said agreement, and were made sole agents for the sale of the company's goods, and were to have the right to hold all the goods of the company in their possession as security for any and all advances they might make to the company. On the 30th June, 1859, the company gave to the plaintiffs a chattel mortgage on "all the engines, shafts, tools, anvils and fixtures, stock manufactured and unmanufactured or in course of manufacture and all other goods and chattels of the company now or hereafter to be at the works in Sing Sing prison," etc.,

as security for the payment to the plaintiffs on demand of all advances made or to be made by them to the company, which mortgage was duly signed and filed in the office of the clerk of Ossining. On the 2d of Sept., 1859, E. S. Hawley, claiming to be secretary of the company in connection with Bliven, went to the premises of the company, caused the articles of merchandise in question which had been manufactured by the said company and were not in a state of completeness for the market, to be boxed up, and Hawley delivered the same to Bliven for the plaintiffs who caused the same to be placed on the cars of the defendant at Sing Sing station as aforesaid, when and where they were taken from the defendants in the manner already described.

The referee reported in favor of the defendants, dismissing the plaintiff's complaint. The plaintiffs then appealed. The following was rendered at the decision of the case by the General Term of the court.

EMOTT, J.—It is no doubt true, as a general rule, that a bailee of property cannot set up against his bailor, that a third person has a better title to the property, and compel the latter to litigate the question of ownership. But it is also true that if the goods are taken from the bailee by the authority of the law, exercised through regular and valid proceedings, it will be a defense to an action by the bailor. The bailee must assure himself, and show the court, that the proceedings are regular and valid, but he is not bound to litigate for his bailor, or to show that the judgment or decision of the tribunal issuing the process, or seizing the goods, was correct in law, or in fact. This is the rule as to bailees in general and it includes the case of common carriers.

The property which is the subject of the present controversy was delivered to the defendants by the plaintiff Bliven, at Sing Sing, and placed in a car for transportation. Before it had been removed from Sing Sing, a complaint was made to a magistrate by a third person, that the property had been stolen by Bliven. The magistrate issued a search warrant, and a constable armed with this warrant, took the property from the defendants forcibly, brought it before the magistrate, and he ordered it delivered to Cheesman, the complainant, as the agent of a manufacturing company. This proceeding was within the jurisdiction of the justice; and his proceedings were regular in form, even if they were corrupt, or the result of a fraudulent combination with Cheesman, as is alleged by the plaintiffs. The defendants are not alleged to have been privy to any such scheme, and as long as the regularity and sufficiency of the proceedings of the magistrate cannot be questioned, the defendants will be protected. The possession of the defendants was terminated with the warrant, and as the justice, having jurisdiction of the subject matter of the complaint, delivered the property to Cheesman, if he had no right to make such a delivery, the remedy of the plaintiffs was against the magistrate, or against Cheesman, or to take the property out of the hands of the latter. The invalidity of the magistrate's order did not re-vest the possession of the goods in the defendants, or renew their liability. The law had, by a valid act of one of its officers, assumed the custody of the property, and put in and to the control and liability of the defendants; and unless, or until the magistrate remanded the property to them, they could not again become responsible for it. Nor did it effect the question, that the plain-

tiff Bliven went before the magistrate, and all proceedings against him, which may have involved the proceedings to search for and take the property, were terminated by his discharge, that might have given him a right to take the property, or to sue Cheesman for it. But it did not redeliver it to the defendants, or renew their obligation to transport it to New York. If that were so, the same consequences might follow if Bliven had been arrested, examined, committed tried, convicted, and then his conviction reversed. Would it be said, if upon his commitment or conviction the alleged stolen property had been taken from the custody of a carrier, where he had placed it, and delivered to the complainant, that after the conviction had been reversed he could forthwith sue the carrier for a non delivery of the goods? This point disposes of the case. The judgment should be affirmed.

MINERAL POINT RAILROAD.

This company was organized Nov. 13, 1861 on the basis of a capital stock of \$500,000, and no debts of any kind outstanding. The road is a single track road, thirty-two miles in length, and is equipped with three locomotives, two passenger cars, two baggage cars, and thirty freight cars. The first annual meeting under the new organization was held in Mineral Point, Wis., on Monday, July 7, 1862. We take the proceedings from the account published in the Mineral Point Tribune, for which we are indebted to Geo. W. Cobb, Esq., Superintendent of the road:

The President reported the success of the Company since its organization Nov. 13, 1861, as follows:

Earnings and Receipts, from Nov. 13, 1861, to June 30, 1862, inclusive.....	\$27,495 59
The Expenditures for all purposes, from Nov. 13, 1861, to June 30, 1862, were.....	\$20,850 77
Uncollected amounts due.....	836 65
Cash on hand.....	5,818 17
	\$27,495 59

The following named persons were elected as directors for the year:

Henry Koop, G. W. Cobb, of Mineral Point; Luther Beecher, of Detroit, Mich.; S. P. Holmer, H. W. Peck, of New York.

Officers.—L. Beecher, President and Treasurer. G. W. Cobb, Secretary and Superintendent.

The following preamble and resolutions were adopted, which we commend to the attention of all parties in interest:

WHEREAS, The facts and experiences of the past five or six years have demonstrated that with local business alone, the Mineral Point Railroad can not for years to come be expected to pay dividends in addition to current expenses and repairs, unless the road is extended so as to secure more business; and

WHEREAS, It is some eight or nine years since the road was commenced, and most of the timber and ties were cut and delivered along the line of the road, it is evident that from this time forward *extra* costs and expenses must be incurred to provide for new timber, new ties and new bridges. Also new locomotives, and for ballasting the road its whole length (it never having been ballasted), and many other additions and improvements abso-

lutely required to be done for the interests of the property; and

WHEREAS, It is both prudent and desirable that (for the purposes of improving and adding to the value of the property), a well settled policy, to be pursued for the next five or ten years, should be approved of and adopted by the shareholders, therefore, it is

Resolved, That the President and Directors are authorized and fully empowered to dispose of, sell, or hypothecate any stocks, claims, contracts, or other property of the Company, and in any and every way practicable raise and provide available means, and use the same, together with the earnings of the road and receipts of the Company, in payment of operating expenses, ordinary and extraordinary repairs, and improving the road bed, depots, rolling stock and machinery generally, whenever and wherever necessary and the work can be done to advantage.

Resolved, That the President and Directors are authorized and fully empowered to extend the road to the north line of Iowa county, at some point on the Milwaukee and Prairie Du Chien Railroad, near the Wisconsin river, and to use all practicable means and measures to push forward the extension and make the connection as soon as possible.

Resolved, That in accordance with the provision for an extension of capital contained in article seven of "articles of association", of the reorganized Company of the Mineral Point Railroad, the capital stock *be and the same is hereby increased to the sum of twelve hundred thousand dollars* (\$1,200,000) shares of \$100 each—of which five thousand shares (5000)—amounting to five hundred thousand dollars—(\$500,000) may be made—constituted and issued as a *preferred stock*, and the same shall be first entitled to receive a dividend of twelve (12) per cent. per annum out of the net earnings of the road, and receipts of the Company—which dividend shall be due and payable semi-annually on the first days of February and August of each year—the balance of the net earnings to be applicable to a dividend on the remaining \$700,000 of common stock that until October 1st, 1862, any shareholder may subscribe for and take the preferred shares by surrendering one \$100 share of common stock and paying fifty dollars in cash (\$50) for each \$100 preferred share so taken. That, after October 1st, 1862, the President and Directors are authorized and fully empowered to dispose of, sell or hypothecate upon the best terms offered all or any part of the common or preferred stock then remaining undisposed of—in such amounts and at such time or times as opportunity offers, and as shall be found convenient or necessary to meet payments in repairing and extending the road.

Resolved, That if the county of Iowa and the towns of Mineral Point and Waldwick, also all stockholders along the line of the road will meet their obligations in a fair and equitable manner, and in harmony with the interest and policy of the new reorganized Company of the Mineral Point Railroad, then the President and Directors are authorized and fully empowered to issue and distribute stock not exceeding twenty-five hundred shares upon the following basis of division as to each interest, viz.:

Town of Mineral Point, 600 shares, \$60,000. Town of Waldwick, 100, \$10,000. County of Iowa, 1500 shares, \$150,000. Old stockholders, 300 shares, \$30,000. Total, 2500 shares, \$250,000.

Or pro rata to any of the parties who shall comply with the true interest and meaning of this resolution.

Resolution adopted by the Board of Directors:

Resolved, That we unanimously approve of the policy and plans set forth in the preamble and resolutions as adopted by the stockholders at this first annual meeting held at the office of the Company at Mineral Point, July 7th, 1862, and we fully believe that by extending the road and making through connections, this will be a dividend paying road.

SPIRAL FLUTED NAILS.

A company has been formed for bringing into practical use the spiral fluted nails, an invention of Mr. W. Wiggell, of Exeter. Mr. Wiggell recently exhibited these nails at Devonport. Mr. John Weary, builder, Mr. Ash, surveyor of the manor, and several other gentlemen, says the *Devonport Independent*, were present. The inventor proved the advantages of the nail in a variety of ways; he first drove one of about 2½ inches long into a piece of 2½ inch deal to within a space little more than the diameter of the nail of the "end-grain," to show that the nail so successfully cleared its way as in no case to cause the wood to split; he next drove a nail into a piece of hard, knotty oak; he nailed two pieces of 1½ inch board together by one nail at one end, and, with a leverage of 2 feet, a strong man present had great difficulty in separating the two pieces; with a nail at each end, a wedge and several powerful blows with a heavy hammer were necessary to get them asunder. The holding qualities of the nail were exemplified by several tests. The nails, however large they may be, or however hard the wood on which they may be used, require no holes to be made before driving; the spiral point causes it to revolve as it advances. Perhaps the tenacity with which they hold in wood would be one disadvantage against their use in all purposes, especially in the nailing of floors where removal is frequently necessary for laying on gas; but this inconvenience the inventor has obviated by the manufacture of another nail, with a slot or screw head, by which it can be turned out with a screw-driver, even more readily than a screw, whilst it could be driven into the flooring with less than a quarter of the labor caused by the use of screws. All present, adds our authority, seemed to concur in the great superiority of the nails over those ordinarily in use. They can be manufactured as cheaply if not cheaper than common nails. The nails are manufactured by machines invented by Mr. Wiggell, each of which will twist at least 4,000 per hour; and the plain nails now in use can be twisted by other machines, also invented by Mr. Wiggell, at the rate of 16,000 per hour. Premises have been taken at Topsham for the purpose of manufacturing these nails.—*London Builder*.

KNOX & SHAIN,
Engineering and Telegraphic
INSTRUMENT MAKERS,
218 WALNUT ST., PHILADELPHIA.
(Two Premiums by Franklin Institute.)
419 1

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet Walnut & Vine
CINCINNATI O

MONETARY AND COMMERCIAL.

The resumption of business, to a limited extent, in our city during the present week has been conducted with a good deal of caution. In the present state of affairs there is but little to create legitimate demand for money; hence first class borrowers are few and the transactions in discount exceedingly light. Money is abundant, and rates from 6 to 10 per cent.

Exchange is in good supply, with a drooping tendency as to rates. The quotations are:

	BUYING.	SELLING.
New York Sight.....	½ @ 1-5 dis.	½ prem.
Boston.....	½ @ 1-5 dis.	½ prem.
Philadelphia.....	½ @ 1-5 dis.	½ prem.
Baltimore.....	½ @ 1-5 dis.	½ prem.
Gold.....	17 prem.	20 prem.

The grocers have had as much as they could do in filling the accumulated orders of the past week; the retailers being allowed to continue selling were nearly sold out, and hence there was much increased activity in this branch of business. There was also considerable activity among retail dry goods men, the weather being exceedingly fine, although warm, brought out their customers in full force, and a large trade was the result. The regular fall trade in dry goods has not yet opened, but there is every reason to anticipate at least a *good demand* for all leading goods, as soon as the threatening aspects and military restrictions by which we are now surrounded may be removed.

There is but little doing in produce, consequent in part upon the difficulties attending transportation.

Flour has a good local market at \$4.10 @ 4.20 for superfine; \$4.25 @ 4.30 for extra; and \$4.40 @ 4.50 for family.

Wheat heavy; Red held at 85c for prime, but buyers are not disposed to pay more than 80c. Prime white, though held at 95c., will hardly bring over 90c.

Corn is held at 45c., but buyers offer only 43.

Oats—New are bring 45c; old are quoted at 47c.

Rye was sold at 55c.

Barley has a nominal range from 75c. to 80.

Whisky, no quotation.

Philadelphia, Wilm'gton & Baltimore RAILROAD!



FOUR PASSENGER TRAINS DAILY!

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11, P. M., Express.
On Sundays at 3.30, A. M., and 11, P. M.
Leave Baltimore for the North and West daily, at 8.30, A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail; and 7.01 P. M., Express.
On Sundays at 7, P. M., only.
Through connections made for all points at the North, East and West.

WM. CRAWFORD, Agent.

J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,

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CINCINNATI

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS.

CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:00 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:50 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:30 P. M.

THIRD TRAIN—6:30 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars. Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

BUSH & LOBDELL. Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and on Most Reasonable Terms.]

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition
The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT
Will be more than sustained under the reorganization
its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the recent *Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore and the Northern Cities give the *privilege of visiting WASHINGTON CITY en route*—being \$1.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the **ONLY ROUTE** by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
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ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

**NEW YORK, BOSTON,
AND ALL EASTERN CITIES,**

CARRYING THE

Gt. Western United States Mails.

Express Trains leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

The **ONLY ROUTE** running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6. CHARLES MINOT, Gen'l Sup't

W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of
C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that pains will be spared to give entire satisfaction in all cases.

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA

(with close connections from Western Cities.)

ALL CONNECTING DIRECT TO NEW YORK,

**THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE AND WASHINGTON.**

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (430 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.

BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburg with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "PA. PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
D. A. STEWART, Freight Agent, Pittsburgh.
CLARKE & CO., Transfer Agents, Pittsburgh.
R. C. MELDRUM & CO., Madison, Indiana.
J. E. MOORE, Louisville, Ky.
W. W. ALKMAN & CO., Evansville, Ind.
R. F. SASS, St. Louis, Missouri.
CLARKE & CO., Chicago, Illinois.
W. H. & E. L. LANGLEY, Gallipolis, Ohio.
G. B. NEAL, Parkersburg, Virginia.
HALL & CO., Marietta, Ohio.
H. S. PIERCE & CO., Zanesville, Ohio.
McDOWELL & McCORM, Portsmouth, Ohio.
R. McNEELY, Maysville, Ky.
J. P. JOHNSTON, Ripley, Ohio.
JOHN TODD, Covington, Ky.
G. L. HEATON, Cleveland, Ohio.
R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where value is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Allentown, Pa.
L. L. HOUSTON, Gen'l Ticket Agent, Philadelphia.
H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:30 P. M.
Mail and Express.....	10:00 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton.

RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day., Toledo & Day. Huntsville.....	5:20 P. M.	10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	6:00 A. M.	11:10 P. M.
Indianapolis and Terre Haute.....	6:00 A. M.	11:13 P. M.
Decatur, Springfield & Quincy.....	11:30 A. M.	3:40 P. M.
Chicago Night Express.....	6:30 P. M.	16:00 A. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	5:00 A. M.	10:05 P. M.
Seymour Accommodation.....	2:00 P. M.	1:15 A. M.
Louisville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES slower than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omni-buses call for passengers as usual.

P. W. STRADER,
General Ticket Agent L. M. & C. X., and C. H. & D. Railroads.

W. H. L. NOBLE,
General Ticket Agent Indianapolis & Cincinnati Railroad.

E. F. FULLER,
General Ticket Agent Ohio & Mississippi R.R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET

NEW YORK.

ALBERT BRIDGES.

JOEL C. LANE

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.
Tube CLEANERS, Steel Wire and Whalebone BRUSH-

Artesian Oil and Salt WELL-TEBING.
Lap-Welded Steel BOILER TUBES.
Glass Enameled Iron WATER PIPE.
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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, SEPTEMBER 25, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

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Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.

Cincinnati, Hamilton & Dayton—

Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	6.45 P. M.

Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.

Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	5.40 A. M.

Sandusky, Dayton & Cincinnati—		
Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation..	5.20 P. M.	10.10 A. M.

Marietta & Cincinnati—		
Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.

Ohio & Mississippi—		
Mail.....	5.00 A. M.	10.05 P. M.
Seymour Accommodation.....	2.00 P. M.	1.15 P. M.
Express.....	5.00 P. M.	5.53 A. M.

Indianapolis & Cincinnati—		
Mail.....	6.00 A. M.	11.10 A. M.
Chicago Express.....	6.30 P. M.	10.00 A. M.

Dayton & Michigan—		
Toledo, Detroit & Chicago Exp.	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.

Cincinnati & Chicago Air Line—		
Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.

Cincinnati, Wilmington and Zanesville—		
Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.

Kentucky Central— (City time.)		
First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

UNION PACIFIC RAILROAD.

SPEECH OF HON. WM. B. OGDEN.

In our report of the first day's proceedings of the Convention we were unable to furnish the speech of Hon. Wm. B. Ogden, the President of the Convention, upon the occasion of his being conducted to the chair.

We take great pleasure in now being able to do so, knowing that it will be read with great profit by all who take an interest in the successful prosecution of this (next to crushing out the rebellion) the greatest national work we have to perform.

To the Commissioners of the Union Pacific Railroad Company:

GENTLEMEN:—I acknowledge the great obligations I am under to you for the honor conferred upon me in connection with this largest of national projects, and fullest perhaps of national results. And while I do so heartily and cordially, I am aware that the best return I can make you will be in the discharge of the duties of the office imposed. To this end my efforts shall be directed so far as my health and circumstances will permit. The great work we have met to organize can only be maintained and carried to a successful conclusion, with circumstances favoring, by the exercise of large national views and action, and by a wise, prudent and very conservative course and policy—a policy which shall commend itself to the capitalists and patriots of the country. The taint of a peculation in connection with it will be as fatal as secession to union.

The act of Congress authorizing and furnishing aid for the construction of the Union Railroad, and under which act we are now assembled, has a good basis and foundation for the accomplishment of the objects intended. It is, nevertheless, scarcely ample, and is imperfect in some of its details, and needs amendment to make it a good working bill, best calculated to insure the success of the enterprise. I have thought it doubtful, perhaps, whether a sufficient and desirable subscription could be obtained until the proper and necessary amendments to the bill should be made by Congress; nevertheless I am perfectly ready to co-operate with you in any effort it shall be deemed proper to make now or hereafter.

If two or three hundred men of high character and standing could be found willing to subscribe for the two millions of stock required to be subscribed before the company can be fully organized, such subscription to be made on national and patriotic grounds, apart from all spirit of speculation, then I can not doubt that Congress would readily make all the proper and necessary amendments requisite to the perfection of the bill and the success of the work. A subscription of \$10,000 each by 200 persons, with a payment of \$1,000 each, or 10 per cent. thereon, would fulfill the present requirements of the law, and secure the complete organization of the company. If this subscription can be made by men of sufficient character and standing to command the confidence of the public, Congress would take pleasure, no doubt, in granting such amendments to such a corporate body as shall enable them to progress successfully with

the construction of this great enterprise to completion.

Except the organization of the company at the outset shall be composed of the best men of the country, and shall command the credit, confidence and respect of the whole community in a high degree, success can hardly be hoped for. Upon such an organization, accompanied by the full maintenance of Government credit, with a continued market for its bonds to be issued in aid of construction, the entire success of the whole measure depends.

Among the additional powers and changes necessary to make the present act a good working bill, efficient to the ends and objects intended, the following amendments are suggested:

First. The bill as passed makes no provision for the condemnation of property needed for rights of way, etc. In passing through Utah or other settled portions of the country, this right and power will be indispensable.

Second. The bill confers no rights to mortgage the lands granted. During the progress of construction, additional means to those provided might for a time be absolutely necessary to the successful prosecution of the work, and might perhaps be obtained to a limited and moderate extent through mortgage security upon these lands if the company were endowed with the power to mortgage.

Third. The present restriction by Congress withholding 25 per cent. of the bonds to be issued from time to time for work upon the plains, and 15 per cent. from like bonds to be issued for construction in the mountains, until the entire road is complete, will seriously embarrass, if not defeat, the progress of the work. The entire appropriations by Congress are really too small, and to reduce them 15 to 25 per cent., pending progress through ten years or more, might prove fatal. In order to induce Congress to remove this restriction, it will be necessary that the organization of the company be such as to command its entire confidence and respect.

Fourth. The bill as it now stands provides that Government work shall have preference over all other business, and that the company shall forward its telegraphic dispatches, carry its mails, troops, munitions of war, supplies, etc., to any extent required, for all of which the Government is to pay such prices as others pay for like service, by crediting the entire amount of such service, in payment of interest and principal upon the bonds to be issued by Government for the construction of the road. This would be all very well ordinarily, but suppose the Government, in case of foreign war, should have occasion for a considerable time to use this road for the transportation of troops, military supplies, etc., to and from the Atlantic and Pacific coasts to its fullest capacity, thereby excluding it from all other earnings?

In such case how could the Railroad Company meanwhile pay its employees, furnish materials, make repairs, etc.? It will be readily seen that it would be impossible for them to do so. The bill should therefore be amended in this particular, by limiting the service to be performed for the Government in any one year, except payment be made in money for any excess of service, to an extent sufficient to maintain and pay the operating expenses of the road.

Fifth. The Government reserves the right to alter, amend or repeal the charter, and also the right to forfeit the whole work and property to itself, provided the company shall fail to pay the entire principal and interest of the bonds to be issued by Government, within

thirty years from the date of their issue. Now it is not to be expected perhaps, that the net earnings of this work will be equal, in the first thirty years, to the amount of bonds proposed to be issued by Government in aid of its construction, and the interest thereon; and although capitalists proposing to subscribe to the stock, will not be likely to object to the right of the Government to alter, amend or repeal, if there shall at any time be good cause for so doing, they would probably hesitate in contributing their means in aid of an object, when they would possibly at a future day be subject to absolute forfeiture. Few, if any, railroads in this country, desirable as their securities now are, will have earned net the entire cost and interest of their construction, in the first thirty years of their existence. And this road may prove a perfect success, and yet fail to make a net earning of its entire cost and interest in the first thirty years.

This provision, therefore, it would seem wise to amend in such a way as not to alarm the capitalist disposed to contribute his means in aid of the work.

Sixth. In addition to the provision that payment for all service rendered the Government shall be made by crediting the amount thereof upon the bonds to be issued by the Government in aid of the work, it is further provided that the company shall annually apply 5 per cent. of its net earnings in payment of said Government Bonds and interest thereon.

This is all very well in itself, but not wholly applicable to the present case. The Government in this case desires a road built for its own benefit and for national uses and purposes, and deeming it undesirable or improper for the Government itself to own the road and run it, it asks aid in its construction from individuals, and empowers them to operate it, but makes no special or usual provision for remuneration to those whom it proposes to induce to invest their money in it. Ordinarily, parties engaged in the construction of railroads, and desiring the means of others in aid of their work, offer their first mortgage bonds in security for the repayment of such means and aid. England guarantees to the subscribers to the stock of her India railroads 5 per cent. annual dividends thereon. It would be doubtful, however, if such a policy would meet with favor in this country, but it would seem perfectly right and proper that the Government, when it comes to us and asks for subscription to stock for this Government road, in which the Government has preference of service, that provision should be made that such subscribers to the stock of the road should have from its first net earnings a dividend of at least seven per cent. per annum, upon the amount of money paid by them upon such subscription: all the balance of earnings to go to the payment of the Government bonds and interest thereon, until all the same shall be fully paid and satisfied.

This would seem to present a reasonable inducement for capitalists to subscribe to the stock. Without some such provision, a spirit of patriotism alone would seem to be the principal motive of making such subscription.

The provision made by Congress in the bill, in aid of the construction of the road, will not be sufficient to complete and equip it. Many millions of stock subscription will be necessary, in addition to the Government provision, in order to the full completion of the road with all its necessary appointments; and inducements for the making of such subscriptions must be provided, reasonable and adequate to success, or that success can not be obtained.

Although railroads have already been con-

structed about half the way from the eastern line of the State of Maine to the Pacific Ocean at San Francisco, and although difficulties that were long pronounced insurmountable, have been overcome in crossing the Alleghenies and other mountains, at different points, still the public are naturally to a degree incredulous as to the successful construction of a railway across the Rocky Mountains and the Sierra Nevadas of California.

As the work progresses, however, and the various surveys across these mountains shall show the practicability of such work, as they will, the public mind will be more and more disposed to entertain and favor it, and confidence and faith will increase in its practicability and usefulness, until men seeking to invest money will find in this perpetual charter, with its then better developed resources and prospects of income, satisfactory reasons for subscribing to its stock—provided a seven per cent. dividend from the first net earnings of the road shall be secured to the stockholders in priority as has been suggested.

Formidable objections to a greater or less extent pervade the public mind in regard to the success of this work, because of the apprehended depth of snow to be encountered in crossing the Rocky and Nevada Mountains. Difficulties on this account, to greater or less extent, will no doubt be met with, but will be overcome and will disappear as they have in other cases.

I remember when the Western Railroad was being built from Albany to Boston, over the Green Mountains, it was stoutly asserted that it never could be used in winter, on account of the snow; still it has been used in winter, as regularly as summer, and whoever will take pains to look into its financial condition will find that few roads in the country promise such extraordinary results to their shareholders.

The Great Pennsylvania Central Railroad, just before its completion from Philadelphia to Pittsburgh, built a very large and liberal Hotel at Altoona, near the top of the Alleghenies, partly as a house of refuge in case their trains in crossing the mountains should get stalled in storms of snow, that their passengers might find there safety, food and shelter.

Recently, when inquiring as to the necessity of such provision, I was informed by Mr. Thomson, the able President of that Company, that they had never had occasion since the completion of their Railroad to use this large Altoona Hotel as such house of refuge.

Similar results, I apprehend, will attend the construction of the railroad from the Missouri River to the Pacific.

Seventh. In view of the existing war, and the indefinite period to which it may be prolonged, it would also be prudent, perhaps, to amend the bill by the extension of time now fixed for carrying out many of its details and for the organization, commencement and completion of the road, etc.

Other necessary amendments may suggest themselves to this body during its sittings, and it will probably decide before adjourning to appoint a committee to present all necessary amendments to Congress, at its next session, in December.

The uses of this road when completed, although they have often been set forth, are not as yet probably fully appreciated by the public. It will scarcely reach the Pacific before lines of steamships from Canton, Calcutta and other Oriental and India ports will be established in connection with it, making the passage to and from San Francisco, across

the Pacific Ocean, in about twenty days, laden with teas, silks and other articles of large value to the pound, which can be transported by rail from San Francisco to our Atlantic cities in another ten days.

With the goods of China, India and Japan within thirty days by steam and rail, of New York, Boston and Philadelphia, the merchants of these and other Atlantic cities can not afford to send their goods on a nine months voyage around the Capes, at the cost of extra insurance, the risk of unfavorable changes in the market, and the loss of interest and time involved. England, France and other European States may also find it necessary and for their interest to avail themselves of this route of communication to carry on their extensive trade with India and China, and other oriental lands.

No doubt much of the vast and increasing travel now carried on between Europe and Asia, via the Mediterranean Sea, the isthmus of Suez and the Persian Gulf, will be diverted to this new route, when completed, because a healthier, if not a shorter, one.

Indeed, it is not impossible nor even improbable, that the local business along this line of road principally growing out of the great universal productions which it will develop—the through traffic between the Atlantic and Pacific States, when added to its uses, as a means of rapid transit between the Oriental world and our Atlantic cities and Europe, may exhibit together such an amount of earnings as will surprise the country, and class it higher among its paying and desirable railroad routes, than even its most sanguine friends would now dare venture to predict.

In a national point of view this work can scarcely be over-estimated. It is most emphatically wise, and the duty of the wealthy, populous, and enterprising States, east of the Rocky Mountains, to see that this great avenue, this interior line of communication and defense, connecting them with their sister States on the shores of the Pacific, be rapidly and thoroughly constructed.

Without it, in case of foreign war and invasion, we have no possible means to defend and protect, or retain and hold those States, as a part of our inestimable Union; without it, they can not share with us all the inestimable advantages of that Union.

A prolonged failure to construct it might lead to an estrangement of feeling, and a sense of neglect mischievous in their consequences.

With it they would be connected in interest with us as firmly as any State with another, and we should be able at all times to protect and defend them from foreign invasion; and new and wealthy states would spring into existence, in the immense gold and silver regions now existing between us and them, along the proposed route of this great national avenue, immensely strengthening the bond of union between the States favorable to Union, from the Atlantic to the Pacific, and without containing any element in them calculated to disturb that Union, or to bring upon us the terrible calamities of secession and war, from which our country is now so gravely suffering.

With all these national and vital considerations moving us to the early accomplishment of this great work, I am unable to see how the question of cost, or of doubt from any cause (except that of utter inability), as to the propriety and necessity of it, can be longer entertained in any local quarter.

Begging pardon of the Convention for detaining it so long with these preliminary remarks, the Chair suggests that the Convention do now proceed to business.

UNION PACIFIC RAILROAD—The following gentlemen were appointed at the late convention to fill the several important committees to which their names are attached:

Committee on Statistics.—Henry Farnam, Chairman, Illinois; John Evans, Colorado; Gilbert C. Monell, Nebraska; George A. Thompson, Wisconsin; Charles T. Gorham, Michigan.

Advisory Committee.—S. J. Tilden, Chairman, New York; D. N. Barney, New York; Dean Richmond, New York; Isaac Sherman, New York; George W. Cass, Pennsylvania; Ephraim Marsh, New Jersey; John Bertram, Massachusetts; Cornelius S. Bushnell, Connecticut; Amasa Stone, Ohio; Jesse L. Williams, Indiana; R. N. Rice, Michigan; C. G. Hammond, Illinois; William M. McPherson, Missouri.

Committee on Abatement of Canal Tolls.—Samuel B. Ruggles, Chairman, New York; Thomas W. Alcott, New York; Dean Richmond, New York; E. DeWitt Bloodgood, New York; Orville W. Childs, New York.

Committee on Auxiliary Legislation.—Sam'l B. Ruggles, Chairman, New York; John M. Wood, Maine; Joseph A. Gilmore, New Hampshire; Henry H. Baxter, Vermont; Edward R. Tinker, Massachusetts; Benjamin H. Cheever, Rhode Island; Henry Hammond, Connecticut; Charles M. Harker, New Jersey; Thomas Swan, Maryland; J. H. Scranton, Pennsylvania; William Dennison, Ohio; Isaac C. Elston, Indiana; Henry Farnam, Illinois; Charles A. Trowbridge, Michigan; John Cathir, Wisconsin; David Blakely, Minnesota; Platt Smith, Iowa; Willard P. Hall, Missouri; Franklin Gorin, Kentucky; J. C. Stone, Kansas; Gilbert C. Monell, Nebraska; John Evans, Colorado; John Atchison, Nebraska; D. O. Mills, California; Wm. T. Ladd, Oregon; R. W. Latham, Dist. of Columbia.

DEBTS AND CURRENCY.

The present period constitutes a new era in the financial relations of the United States. The relations of the several parts of the great system of property and credits are rapidly changing. They will soon be constituted on an entirely new basis. *First*, we shall have an immense National debt, to which, any we have previously had may be called nothing. *Second*, to sustain the public credit with this immense debt, we shall have a direct tax on property and its transfers which has never existed since 1812-15, and then only to a small extent. *Third*, one very large article of domestic produce, cotton, amounting to one hundred millions per annum, is entirely thrust out of existence, and is not likely ever to be of the same importance again. These are facts of great magnitude and must work momentous consequences. The proportions and relations of property and debts will be greatly changed. We do not propose, however, to examine a problem of such magnitude here; but merely to notice one branch of it, and that only to a small extent.

In the relation which currency bears to payments and to values, it seems to us the main element has been generally left out of

view; viz., the *debts of the community*. But this element is of far the most important of the whole. The financial operations of the United States Government rest now on the basis of a National currency, which is convertible into bonds, the interest of which is payable in coin. The bonds can be sustained by the payment of interest in coin, it being presumed that, at a distant period of time, when the present exigencies are over, the government can pay the bonds themselves or renew them. But what keeps the currency up at a point in which it is on a par with commodities? Simply the fact that it is a *legal tender*. Here we come to the point which we wish to consider. It is plain to us, that a very large issue of such currency (say three hundred millions) could not be kept up to the common level of commerce by the common daily transfer of property. That is, we think the demand for currency of this kind would not be sufficiently great. But we see the demand is enough fully to absorb all that is issued and probably very much more. What is it then absorbs and keeps up the value of this currency? We answer it is the debts of the community, a large part of which is in constant process of payment on the one hand, and of creation on the other. To-day A is paying off a debt of \$2,000, which he pays in United States legal tender notes. At the same time B is borrowing \$3,000, which as he wants money for business he is willing to receive in these notes. Here is a demand for \$5,000 United States legal tender notes caused by debt, and this process is continually going on, aside from other commercial transactions; and we conclude this is the main element in the credit of the National currency, which is solely caused by its being a legal tender. This leads us to consider the amount of debts of the community. The only attempt at estimating these we have seen is in the report of the Commissioner of Statistics for the State of Ohio. He has ascertained almost exactly the existing debts, and thus furnishes a unit by which we can measure the debts of Ohio. All *liens* on property are recorded, all payments, all discounts of banks, etc., so that, in reality, the problem is solved with much less difficulty than at first would seem to attend to it. The debts of Ohio, including State, Municipalities and people stand thus: (*Vide Report of the Commissioner of Statistics.*)

State debt.....	\$14,250,000
Municipal debts.....	9,650,000
Judgment debt, (outstanding).....	18,832,020
Recorded mortgages and liens.....	54,473,962
Railroad debts.....	56,000,000
Bank and commercial debts.....	55,500,000
Private unnamed debts.....	10,000,000
Aggregate debts.....	\$222,905,982

It will be observed that nine tenths of all the above debts are ascertainable, and consequently the error in the aggregate must be small. It is well known that the proportion of debts in such commercial States as Massachusetts, Rhode Island and New York is much

greater; but on the other hand, in the agricultural States of the North-west it is much less, so that on the whole, the proportion of debt in the State of Ohio is nearly an average for that of all the northern States. The State of Ohio is in population about one tenth of all in the loyal States. We have then, as the debt of the loyal United States, ten times that of Ohio, which is \$2,227,059,820. This aggregate debt is comprised nearly as follows:

State and municipality debts.....	\$250,000,000
Recorded debts.....	810,000,000
Railroad debts.....	530,000,000
Commercial debts.....	600,000,000
Private unnamed.....	100,000,000

All but the last item are ascertainable and not far from what we have stated them. Now of this debt all the commercial and private debts and half the record debts (making \$1,100,000) are changing each year, and for their easy payment full \$400,000,000 are required. The National currency being made a *legal tender* is the currency in demand for these payments. This demand is entirely beyond the ordinary demand for merely commercial purposes.

Again, if we take into view the payments on account of the National debts and interest and the constantly increasing demand for commercial business, we shall see at once that there is an actual demand for a great volume of National currency. From the elements of the financial problem adduced above we think it quite obvious that the demand will not only absorb all the government purpose to issue, but much more without being depreciated even as much as it is now. The present price of gold or rather discount on paper is artificial. There is no actual demand for gold which justifies it, because gold is used to settle balances with, and in this case only foreign balances. If we are right in the views we have taken, gold is more likely to fall than to rise, and the National currency will continue to be in demand, and probably hereafter form the staple currency of the country.

STEEP GRADES AND LOCOMOTIVES.

(Continued.)

Before coming to the consideration of working your mountain grades, it may be as well here to examine the working of the Baltimore and Ohio, Pennsylvania Central, and other grades, with reference to freight trains. The Baltimore and Ohio road has, as you are aware, 30 miles of "grouped gradients," ranging from 106 ft. to 116 ft. per mile (1 in 50 to 1 in 45½) one of the latter, or 116 ft. grades from Piedmont to Altamont, being 11 miles long. East of Harper's Ferry there is a summit at Parr's Ridge, with 2½ miles of grade on each side, ascending and descending at the rate of 82 ft. per mile (1 in 64.4). Five engines, built from 1860 to ten years ago by Samuel J. Hayes & Co., are now in use on this grade.

Esq., at the company's shops, at Mount Clare, Baltimore, are said to be the most efficient and the most economical in draught of any on the road. These have 20 inch cylinders, 22 inch stroke, eight coupled driving wheels, 3 ft. 7 in. diameter, and weigh 57,400 lb. in running order, and exclusive of tender. The majority of the engines on the road are, however, Mr. Ross Winans' "camel backs," which have 19 inch cylinders, 22 inch stroke, eight coupled drivers 3 ft. 7 in. diameter, and which weigh 54,200 lb. in running order, and exclusive of tender. A considerable number of engines were also put on the road between three and four years ago, having 18 in. cylinders, 24 in. stroke, six coupled drivers 4 ft. 2 in. in diameter, and a truck, and weighing 60,000 lb. Of the performance of the latter, or ten wheel engine, I have no particulars, but of the two former classes I may give the following:

Their regular load, on the 116 ft. grades, is eight cars, weighing, with freight, 114 tons of 2,240 lb. (I shall herein refer to 2,240 lb. as the standard ton, notwithstanding that, in America, 2,000 lb is generally taken as a ton,—the above load being 128 tons of 2,000 lb.) On several occasions the 20 in. cylinder engines have taken up eighteen loaded cars, weighing, with freight, 200 tons. On one trip 18 cars, weighing 201 tons, were taken up, a performance which may be analysed as follows:

Total weight, engine, tender and train.....	242 tons.
Gravity on 116 ft. grade.....	11,912 lb.
Friction at an average, say, 10 lb. per ton.....	2,420 lb.

Total resistance of engine, tender and train, and consequent tractive force of engine.....	14,332 lb.
--	------------

Equal to one-fourth the weight on the driving wheels, and equal to a mean pressure of 70 lb per square inch on the 20 in. pistons throughout their strokes.

A series of trials, as follows, was made in the autumn of 1852 and in January, 1853, with two of the 19 inch and one of the 20 inch cylinder engines, the results of which trials represent the capacities of the same class of engines at the present time:

Date of trip.....	Oct. 21, 1852.	Oct. 22, 1852.
Trip fm. Piedmont to Altamont	11 miles of 116 ft. grade.	
Number of engine.....	No. 83.	No. 102.
Diameter of cylinder.....	26 in.	19 in.
Stroke of piston.....	23 in.	22 in.
Diameter of 8 coupled drivers.	43 in.	43 in.
Weight of engine, all on drivers	57,400 lb.	54,200 lb.
Number of cars drawn.....	eight.	eight.
Weight of engine, tender and train.....	126½ tons.	127½ tons.
Gravity of this mass, on 116 ft. grade.....	6,236 lb.	6,264 lb.
Whole resistance, friction estimated at 12 lb per ton.....	7,756 lb.	7,816 lb.
Average speed in miles an hour	11.46	14.57
Equivalent velocity in feet per minute.....	1,008½	1,264½
Horse power exerted.....	337	299½
Equivalent average pressure on pistons thro'out their stroke.	37.9 lb.	42.3 lb.
Boiler pressure.....	80 to 106 lb.	90 to 123 lb.

The following trips were made up the 82 ft. grades, 2½ miles long, at Parr's Ridge, east of Harper's Ferry:

Engine No. 72, 20 in. cylinder, and in all other respects the same as Engine No. 83, [of which the dimensions are above given.

Date of trip, 1852.....	Nov. 10	Nov. 13	Nov. 17	Nov. 20	Nov. 20	Nov. 17	Nov. 17
No. of cars drawn.....	18	16	17	17	17	17	17
Weight of engine, tender and train, tons.....	937	938	934	954	945	945	949
Gravity and friction of train, etc. lb. per ton.....	11.511	10.657	10.502	11.355	10.978	11.104	11.104
Average speed, miles per hour.....	7½	12½	10	7.89	8.82	8.82	8.82
Equivalent velocity in feet per minute.....	660	1,100	880	694	778	778	778
Horse power exerted.....	250.2	355	280	239.4	258	258	291
Equivalent average pressure on 20 in. pistons throughout their stroke.....	56½ lb.	52 lb	51.3 lb.	55½ lb	53½ lb	54½ lb	54½ lb
Boiler pressure.....	.....	.....	100 lb to 135 lb.	.....	.....	.....	.....

Engine No. 83 (same as No. 72) on same grade at Parr's Ridge.

Date of trip, 1853.....	Jan. 7	Jan. 11	Jan. 18	Jan. 21
No. of cars drawn.....	16	18	17	14
Weight of engine, tender and train, tons.....	220½	283	299½	292½
Gravity and friction of train, etc. lb. per ton.....	10.382	12.673	10.725	9.96
Average speed in miles per hour.....	10.71	10.34	9.37	13.64
Equivalent velocity in feet per minute.....	942.4	910	854½	1,141½
Horse power exerted.....	20½	340½	328	346.4
Equivalent average pressure on 20 in. pistons thro'out their stroke.....	50.4	61.9	52.4	48.7
Boiler pressure.....	110 lb to 135 lb.	.....	.....	.....

Engine No. 102, 19 inch cylinder (already described) On same grade at Parr's Ridge.

Date of trial, 1852.....	Nov. 11	Nov. 11	Nov. 15	Nov. 15	Nov. 22	Nov. 23
No. of cars drawn.....	18	16	15	17	17	17
Weight of engine, tender, and train, tons.....	232½	236.7	236	245.9	239½	239½
Gravity and friction, friction 10 lb. per ton.....	11.596	10.590	10.590	10.950	10.735	10.735
Average speed, miles per hour.....	7.89	4.65	3.49	not taken	not taken	not taken
Average speed, feet per minute.....	694	366.4	367	“	“	“
Horse power exerted.....	237½	114.4	98.3	“	“	“
Equivalent average pressure on 19 in. pistons.....	61.1 lb	57½ lb	57 lb.	59.4 lb	58 lb	58 lb
Boiler pressure.....	.....	100 to 145 lb	100 to 145 lb	.....	.....	.....

Engine No. 118, 19 inch cylinder, and in all respects the same as No. 102, already described. On Parr's Ridge grade.

Date of trip, 1853.....	Jan. 4	Jan. 8	Jan. 17	Jan. 17	Jan. 17	Jan. 17
No. of cars drawn.....	.....	18	17	17	17	17
Weight of engine, tender and train, tons.....	93½	987.3	945.2	928½	928½	928½
Gravity and friction, friction at 10 lb. per ton, lb.....	11.700	12.865	10.980	10.943½	10.943½	10.943½
Average speed, miles per hour.....	9.68	7.50	8.82	8.82	8.82	8.82
Average speed, feet per minute.....	833	600	776	776	776	776
Horse power exerted.....	303½	237.3	288.2	288.2	288.2	288.2
Equivalent mean pressure on 19 in. pistons throughout their strokes.....	63.7 lb	60.9 lb	59.4 lb	55.4 lb	55.4 lb	55.4 lb

The Parr's Ridge grade, being but 2½ miles long, does not present the same difficulty as a like grade, 12 or 15 miles long, inasmuch as, going up in from 9 to 15 or 18 minutes, the engines would not run down their steam to anything like the same extent.

I have estimated the friction of engine, tender and train at 12 lb per ton on the 116 feet grades, and 10 lb on the 82 feet grades. This difference, of course, has nothing to do with the grade *per se*, but, on the steeper grade the proportion of the weight of the engine to the whole weight of the train was double what it was on the 82 feet grade, and the speed averaged considerably higher than on the 118 feet grade.

These trips represent, if anything, rather more than the ordinary performance of the engines, some feeling of emulation having entered into the trials, and the boilers of the Winans engines having been, I believe, a little strained. Nevertheless, I understand that from 16 to 18 loaded cars are the regular load of an unassisted engine over Parr's Ridge, although longer trains are helped over by pushers.

The 10 wheel engines are, I believe, now more in favor on the road, as being easier on the track; but I am not aware that they are employed, with freight trains, on the heavy grades.

(To be continued.)

PORTLAND, SACO & PORTSMOUTH RAILROAD.

The annual meeting of this company was held at Kittery, Maine, June 2d, 1862. The following is the annual report presented to the meeting by the Directors:

The directors respectfully submit the following report—being the twenty-second made to the stockholders, and closing the financial year ending, May 31, 1862—showing the cost of the road, the improvements and repairs, the expense of operating, the gross and net income of the past year, its financial and general condition, and the ability to discharge

its responsibilities to the shareholders, the guarantors and the traveling public.

We regret to say the business of the year has not yielded so much as that of former years; but as the gross receipts have fallen off, we have endeavored to curtail the expenses so far as could be done with a proper regard to the safety and efficiency of the road. The deep snows and frequent storms of the past winter caused constant repairs of engines and other equipment, and the employing a large force of laborers, which materially increased the running expense.

We believe we are warranted in saying that the road, in all points, was never in a better or safer condition than at the present time; and as a whole, there is no safer or better conditioned road in New England. Entirely free from *debt* or any embarrassment.

On the 17th of May the directors, with a portion of the directors of the Boston and Maine and Eastern Railroads, went over the road by special train, for the purpose of examining its condition, repairs and improvements of the past year. A general commendation and approval was awarded by all.

Cost of railway, including its connections with roads leading out of Portland, Portsmouth bridge, wharf and lands at Portland, etc., etc., all of which is charged to the capital stock account, which embraces the amount of capital allowed by the charter, say \$1,500,000.

RECEIPTS.

From 201,781 passengers.....	\$144,418 72
From freight.....	49,111 48
From expresses.....	3,565 96
From mails.....	7,837 44
From sundries.....	2,550 15
Total receipts.....	\$207,483 75

EXPENDITURES.

Machine shop.....	1,207 39
Maintenance of way.....	31,217 57
Locomotive power.....	35,246 89
Trains.....	13,068 10
Office establishment.....	12,034 95
Stations.....	10,309 10
	102,983 40
Credited renewal fund.....	10,000 00
	112,983 40

Net earnings.....	\$94,500 35
Deduct two dividends of \$5,000 each payable in December, 1861, and June, 1862.....	90,000 00
Net, over expenses and 6 per cent. dividend,...	4,500 35

Surplus, per report May 31, 1861.....	65,123 88
Less over estimate of net income for May.....	240 62
	64,883 26
Add surplus this year.....	4,500 35
	69,383 61

Deduct—	
Contribution in favor of Ruel Wil-	
liams foreclosures.....	1,564 67
Cost of Saco bridge.....	10,673 25
Sea wall at Portland bridge.....	8,096 95
	26,034 27
Surplus May 31, 1862.....	\$43,348 34

IMPROVEMENTS, REPAIRS, &c.

This surplus is invested in improvements, stock of materials on hand for the use of the road and wharf property.

At Portland, the repairs on the wharf, commenced but not finished last year, have been completed in a most thorough manner. The wharf and the buildings on the same are now

in a substantial condition and in excellent order, and will require but little outlay for several years.

The station buildings, work-shops, etc., at Portland have had nothing of consequence done to them but are in good order and well adapted to the present wants of the road. The new building for passengers and offices proves to be a most desirable and important acquisition.

The city of Portland having allowed us to fill in solid a portion of the flats so as to dispense with a part of the wooden bridge leading into Portland over Fore river, we have the past year built a substantial sea wall of about eleven hundred feet in length, with strong stone abutments, and filled in solid with gravel. This improvement leaves only about sixteen hundred feet of pile bridge over Fore river.

The severe storm and unprecedented high tides in November last caused considerable damage to the roadbed at Portland, Cape Elizabeth, Scarborough, and to the new work on Fore river. Repairs were at once made and no detention was caused to the trains.

The bridge over Saco river has been rebuilt the past year, the piers and abutments raised about nine feet and the abutment entirely rebuilt on the south-west end of the bridge or south side of the river. The bridge is a strong, substantial wooden structure upon the Howe plan. The workmanship and materials are very satisfactory. The old bridge was removed, the piers and abutments raised without any damage to the passage of the trains or any accident whatever. It is proposed to cover this bridge the present season to protect it from the weather.

At Portsmouth a new bridge with a draw has been built over the river from Noble's Island. The location and line were changed to avoid the sharp curves at the old bridge and draw.

All the bridges, both on the line of the road and at the farm and road crossings have been kept in good and safe condition by repairs and renewals, as circumstances required. A number of abutments and cattle passes have been built.

The track and roadbed has been kept in good repair by renewals of rails, chairs, sleepers and graveling. We have laid down the past year one hundred and twenty-five tons of new iron, and between five and six thousand of new sleepers, and chairs corresponding. We have on hand and paid for about eighty tons of new iron, and sleepers sufficient to lay it, for the wants of the present year.

The equipment has been kept in the best possible condition by extensive repairs on the engines and freight cars and the rebuilding of cars. The locomotive power and other equipments is quite ample for the present business of the road.

The trains have been run with great regularity, with few exceptions, occasioned by the

deep and frequent snows of the last winter. There has been no injury or accident during the year to passengers or employees. During the time we have transported over the road fourteen regiments of infantry and cavalry by extra trains.

The equipment of the road are as follows: 10 locomotive engines, 3 passenger cars, 2 baggage and mail cars, 41 eight-wheel platform freight cars, 11 four-wheel platform cars, 39 eight-wheel box cars, 3 four-wheel box cars, 10 hand cars, 2 stone cars, all in good order. The passenger cars for the through business of the road are furnished principally by the Eastern and Boston and Maine Roads.

Miles ran, 146,707; average receipt per mile, \$1.41½; per cent expenses of receipts, .49½; passengers carried, 201,781; average receipt per passenger, .72.

TRADE AND COMMERCE OF CINCINNATI.

We are indebted to the *Price Current* for the annual report of Wm. Smith, Esq., the efficient superintendent of the Merchants' Exchange, of the trade and commerce of Cincinnati, for the year ending August 31st.

In regard to the general business of the year, Mr. Smith says:

In examining and analyzing the trade of the city, during the past year, we find many things encouraging. The business done in breadstuffs exceeds that of any previous year. The pork business has been the largest ever known before, if we add the receipts of cured meats to the number of hogs packed, and even this is the largest of any previous year, but one, and within a few hundred head of being up to that.

The receipts and shipments of merchandise, including dry goods, chiefly, are ahead of any previous year. The business done in groceries has been very large, considering the total absence of Louisiana sugar and molasses, and it has paid a fair profit, and been more satisfactory than ever before, as regards the credit system, a vast amount having been sold for cash, and none were able to buy on credit but those regarded good beyond probable contingency. The dry goods trade, both in its wholesale and retail branches, is on a sounder basis than it ever was before, in this city; and the long and reckless credit system, which has made this business so uncertain and precarious, has been abandoned, and a large amount has been sold for cash and none on long time. The heavy advance in many kinds of goods has made the business unusually profitable and satisfactory.

In the manufacturing departments, in wood and iron, there is a sad falling off, even as compared with the year 1860-61, and all our workshops, in these departments, are not operating to over one-third their capacity. It will be seen by referring to our tables, that the exports of cabinet ware, under the head of furniture and chairs, have decreased to a vestige of their former greatness; and so it is with the product of our machine shops and rolling mills, the deficiency in iron being quite large. In the boot and shoe business, crockery ware, hardware, nails, molasses, butter, cheese, grass seeds, white lead and castings, the falling off is marked and suggestive. But on the other hand, in looking over our

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	64	48	\$	\$										
Baltimore and Ohio.....	Md.	64	330	13,111,800	10,781,833	566,07	3,022,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do											2,500,000	6	95	1885	
do do											700,000	6	84	1880	
do do											1,128,500	6	90	1875	
do Washington Branch.....	Md.	30		1,650,000											
Bellefontaine and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	130,130	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7	55	1866	
do do											1,000,000	6		1867	
Buffalo and State Line.....	N.Y. & Pa.	122 1/2	68	1,950,950	1,049,000	27,545	911,019	492,047	June 30, 1860	2d ".....	160,000	7		1870	
do do															
Burlington and Missouri.....	Mo.	132 1/2	75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	96		3,798,400	8,820,000		1,997,465	723,950	Dec. 31, 1860.	1st Mortgage.....	450,000	6	100	1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	800,000	7	80	1864	
do do										2d ".....	800,000	7	64	1865	
do do										3d ".....	950,000	7		1865	
do do										4th " S. F.	1,365,200	7		1866	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	105	1865 & 1870	
do do										2d ".....	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d ".....	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						3d ".....	1,000,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	80	Feb & Aug 1	
do do										2d ".....	3,600,000	7	52	Feb. & Aug 1	
do do										3d ".....	2,400,000	6	26	May 1.	
Chicago and Rock Island.....	Ills.	68 1/2	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	105	1870	
Chicago, Burlington and Quincy.....	"	86	138	4,629,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	110	1863	
do do										" 2d " S. F.	813,000	8	108	1860	
do do										1st Mor. Chi. & Aur.	399,000	7		1867	
do do										2d ".....	303,000	7		1869	
do do										1st "Cent. Mil. Tract	392,000	7		1864	
do do										2d ".....	245,000	8		1868	
Chicago, Iowa and Nebraska.....		82		No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	99	60	2,155,800	1,356,000		644,928	174,505	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d ".....	950,000	7	100	1860	
Cincinnati Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d ".....	532,000				
do do										3d ".....	104,000				
do do										Income.....	365,500				
Cleveland and Mahoning	Ohio.	68 1/2		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d ".....	439,000	7			
do do										3d ".....	341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	25 1/2	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	100		1860	
do do										2d " M. L. or 1st Ex.	1,188,000	90 1/2		1873	
do do										3d 2d Ex.....	1,163,000	81		1865	
do do										4th 3d Ex.....	1,154,000	64			
Cleveland and Toledo.....	Ohio.	53 1/2	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	359,000		96	1867	
do do										1st " 2d Div.	263,000			1872	
do do										2d ".....	265,000			1862	
do do										1st "Tol. Nor. & Cleve	521,000			1863	
do do										2d ".....	293,300			1864	
do do										Income.....	44,500			1864	
do do										C. & T. Income.....	300,000			1864 & 1890	
Cleveland, Columbus and Cincinnati.	Ohio.	121	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000				
Cleveland, Painesville and Ashtabula..	"	125	98 1/2	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000				
do do										2d ".....	303,000			1862	
Columbus and Xenia.....	Ohio.	105 1/2	54 1/2	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700			1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666	2,512,000					2d ".....	2,212,000	9			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	50		
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000	90		1875	
do do										2d ".....	1,000,900	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	Iowa.	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	788,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		986,061	1,219,100	249,668	124,140			2d ".....	180,000				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d ".....	180,000				
Galena and Chicago Union.....	Ills.	73 1/2	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000		104	1862 & 1863	
do do										2d ".....	1,520,000			May 1, 1875	
Great Western	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report										
Greenville and Miami.....	Wis.	32		300,000	473,000	75,000	63,141	13,573		Land Mortgage...	5,000,000				
Hannibal and St. Joseph.....	Mo.	206		1,041,086	10,554,000	220,336	996,907	512,933	Sept. 1, 1860.	Mortgage Conv.....	1,354,000	45			
do do										1st Mortgage.....	927,000	6	30	1873	
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	4,000,000	7	110	1869 & 1870	
Hudson River.....	N. Y.	51 1/2	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	2d S. F.	2,000,000	7	106 1/2	1860	
do do										3d ".....	1,840,000	7	104	1875	
Illinois Central.....	Ills.	63	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	28,000	7	100	1868	
do do										Construction.....	12,885,000	7	100	1875	
do do										".....	4,115,000	6	97	1875	
do do										Debentures.....	42,740	7	96		
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000	7			
do do										2d ".....	578,000	10			
do do										Income.....	38,700	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000	7		1866	
do do										2d ".....	400,000	7	85		
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort.....	200,000	7	85		
do do										1st Mortgage.....	649,284				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d ".....	314,000				
Iron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,013,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st ".....	249,000	7	75	1861
do										2d ".....	392,000	7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st ".....	290,000	7		
do										2d " Conv.....	1,000,000	7		
do										3d ".....	600,000	7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.....	904,000		89	
do										2d " E. D.....	1,000,000			
do										1st Land Grant W D.....	4,000,000		21	
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.	29		514,433	130,000		104,944	42,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1863
Little Miami.....	Ohio.	65					1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000	6		
Louisville and Frankfort.....	Ky.	65		1,169.59	384,519		245,910	98,679	June 30, 1861	1st Mortgage.....	248,000	7		
do										1st ".....	2,000,000	7		
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.....	400,000			
do										1st " Memphis Br.....	500,000			
Louisville, New Albany and Chicago..	Ind.	288		2,500,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861
Marietta and Cincinnati.....	Ohio.	208		8,561,213	190,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv.....	2,510,000	7		1868
do										2d ".....	2,000,000	7		
do										3d ".....	1,500,000	7		
do										Sterling Income.....	333,000	4		
Michigan Central.....	Mich.	68½	284	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	Domestic.....	928,617	6	92½	1872
do										1st Mortg' Sterling.....	467,481	8	84	1869
do										1st " Conv.....	500,000	8	96	1860
do										1st " unconv.....	250,000	8	106	1869
do										1st " Dollar Conv.....	2,598,000	8	108	1882
do										1st " S. F. Conv.....	4,153,000	9	99	1860
Michigan South'n & North'n Indiana	Mich. &	31½	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. So.....	991,000	103	100	1861
do										" Nor. Ind.....	985,000	100	100	1863
do										" Goshen Line.....	1,168,000	101	101	1865
do										S. F. Toledo.....	2,850,000	101	89	1877
do										2d Mortgage.....	2,465,000	8		
do										1st Mortgage.....	400,000	8		
do										2d ".....	201,000	8		
do										1st Mortgage.....	420,000	8		
do										2d ".....	600,000	8		
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,363	159,456	82,182	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7		1891
do										2d ".....	1,000,000	7		
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	4,000,000	7		
do										2d ".....	201,000	8		
Milwaukee and Prairie du Chien.....	Wis.	34	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7		96
Milwaukee and Western.....	Wis.	71		No report						2d ".....	1,000,000	7		
Mississippi and Missouri.....	Iowa.	35		No report						Oskaloosa Div.....	1,425,000	7		
do										Land Grant.....	7,000,000	7		
do										Mortgage.....	711,000	102½		
New Jersey.....	N. J.	34		4,397,808	688,000		992,767	579,981	Dec. 31, 1861.	1st Mortgage.....	3,000,000	110		
New Jersey Central.....	N. J.	64		2,200,000	3,180,000	175,000	1,185,847	710,396	Dec. 31, 1860.	2d ".....	400,000	110		
New York and Erie Pref.....	N. Y.	68½		Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860.	1st Mortgage.....	3,000,000	110		
do		33½								2d ".....	4,400,000	104		
do										3d ".....	600,000	93		
do										4th ".....	4,900,000	82½		
do										5th ".....	1,792,500	105½		
New York and Harlem Pref.....	Conn.	40½	138	5,717,190	6,055,752	.....	1,142,251	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	101½	1873
do		16								2d ".....	1,000,000	7	101	1864
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,607	7	94	Dec. 1, 1866
do										".....	978,000	6	101	Oct. 1, 1875
New York Central.....	N. Y.	93½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.....	7,925,000	6	103	May 1, 1883
do										Mortgage.....	3,000,000	7	103	June 15, 1864
do										Construction.....	2,086,500	6		1885
Northern Central.....	Md.	138		2,260,000	5,890,300	537,923	1,018,103	283,627	Dec. 31, 1860.	State Loan.....	4,350,000	6		
North Missouri.....	Mo.			2,423,736	4,350,000	93,798	400,008	96,731	Nov. 1, 1860.	1st Mortgage.....	2,193,500	7		
Ohio and Mississippi, Eastern Div.....	Ohio & Ind	192		Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	3d ".....	316,935			
do										Construction.....	4,637,920			
do										Income.....	3,591,185			
Ohio and Mississippi, Western Div....	Ills.	148		.....	3,202,403		No report			State Loan.....	7,000,000	6		
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W.....	2,800,000	6		
do										Construction.....	4,500,000	6	104½	1888
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.....	4,905,000	6	98½	1875
do										2d ".....	2,319,000	6		1875
do										2d " Sterling.....	1,957,440	5	89	1875
do										State Works.....	7,200,000			
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report			1st Mortgage.....	2,300,000	6	99½	1884
Philadelphia, Wil. and Baltimore.....	Del.	98		5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863
do										1st Mort. O. & P.....	1,000,000	7	96	1865
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	2d ".....	750,000	7	83	1866
do										1st " O. & I.....	1,000,000	7		1872
do										2d ".....	280,000	7		1873
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.....	500,000			
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.					
do														
Sandusky, Dayton and Cincinnati ..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856
do										".....	997,000	7		1866
do										".....	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.	125		818,779	1,385,200	132,063	195,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886
Scots and Hooking Valley.....	Ohio.	56		404,975	500,000	100,000	110,200	53,100						
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000			
do										2d ".....	450,000			
Steenbenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,300,000	7		1870
do										2d ".....	900,000	7		1865
do										1st Mortgage Conv.....	1,000,000	7	110	1862
do										2d " Conv.....	2,000,000	7	92	1868 & 1870
do										1st " Bel. & Ill.....	517,000	7		1873
do										1st Mortgage.....	240,000	7	92	1866
Terre Haute and Richmond.....	Ind.	100		1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	3,400,000	7	92	Aug. 1, 1865
Toledo, Wabash and Western.....	Ohio & Ind	243		2,123,506	5,996,949	52,389	233,546			2d ".....	2,500,000	7	70	Nov. 1, 1878
do										Mort. Coupons....	96,049	7		1860 to 1865

statistics of imports and exports we find an increase of a decided nature, in alcohol, beans, candles, corn, cooperage, beef cattle, flour, feathers, fish, dried fruit, grease, hay, horses, lard, leather, oats, pork, potatoes, rye, soap, salt, starch, assorted packages of merchandise, and tons of the same, leaf and manufactured tobacco, tallow, and domestic and foreign liquors, including wines. There are many other articles in which the increase is but slight.

In relation to our great staple, the product of the hog, Mr. Smith says:

The low price of pork, being the lowest current in this market for a long time, induced a speculative demand for mess soon after the packing season commenced, of a somewhat singular nature, as all classes of trade, and not a few professional men, including money dealers, were represented in the speculative operators. The grounds or basis of this movement were: first, the unusual low price, \$9.50 per bbl., precluding any serious loss, they reasoned; and, second, the probability that a southern demand would arise during the coming spring, which would lead to an important advance. These premises seemed to them correct, and the investments were made anxiously and largely, and with few exceptions still remain undisturbed, and the prospects are that they will remain so to a great extent until another pork crop is secured, which promises to be an abundant one.

The quantity of lard and boxed meats shipped from this country to England during the season is without any previous precedent, and yet did not lead to any special excitement, or unusual speculative demand. The total weight of the lard and pork exported from December to August was equal to that of two million hogs! Nothing like this ever happened before. And the fact that this immense amount met with a market is a most important and suggestive one. It shows what an amount of surplus food this country can spare, and that there is now secured a market for our pork in Great Britain and on the continent, of such magnitude, that compared with it the amount consumed heretofore in the Southern States sinks into comparative insignificance. Whilst it is true that the low price extended the demand, by introducing it in markets where heretofore it has been unsaleable, yet a higher price next season will not exclude it, because the price of European meat is vastly higher than we can furnish American, and even obtain much higher prices than those current the past season. The introduction of it into new markets is, therefore, an important point. Lard has been shipped to all European markets where it is used; and bacon, though chiefly to England, yet a considerable amount went to France, the German States, Belgium and Denmark, and we notice that it met with such favor in this latter country that it is now admitted free.

This is certainly very encouraging under the extraordinary circumstances by which we have been surrounded, and shows very clearly the wonderful power of our people to conform to fluctuations in trade, that would have utterly prostrated any other nation.

The condition of money affairs during the year was equally satisfactory. On this point Mr. Smith observes:

Although a sweeping and radical change has taken place in the currency of the country since our last, the money market has

been quiet and unusually easy throughout the year. The want of confidence which existed at that time, and long after the commencement of the rebellion, gradually disappeared as the people became familiar with the facts, and the doubtful and uncertain in all the departments of trade had been removed, and the commercial and financial affairs become adjusted to existing circumstances. The manner of doing business was changed from a long credit system to cash, or what was regarded its equivalent, thus greatly reducing the risk attached to business paper. Those who had been embarrassed in their business affairs, or had been doing business without adequate capital, failed, and the trade was confined to those who had ample means. In fact the abundance of money became burdensome, and rates of interest ruled extremely low, good business paper being sought for, at times, at 6 per cent., and at no time since the first of April did the rate of interest exceed 10 per cent., and we may say that 8 per cent. was the prevailing rate.

In regard to the crops for the past two years, Mr. Smith says:

The crops of all kinds gathered in 1861, as noticed in our last annual statement, were good, with but little exception, and therefore food was abundant and cheap. The crops the present year are even more abundant, in all the loyal States. The wheat crop in this State, Kentucky, Indiana, Pennsylvania, Illinois, Iowa, Missouri, Minnesota, Wisconsin, and Michigan, is above an average, and in some of these States largely so. There is a large stock of old corn still in the hands of farmers, and the growing crop promises to be an unusually large one. Oats and barley partially failed. The spring being late and unusually wet, there was but a small amount of land sown with either, and oats were badly injured by rust. The grass crop is very abundant, but was not saved in good order in some sections, owing to heavy and protracted rains about the time of the hay harvest. The abundance of the leading crops is of great importance under existing circumstances, not only insuring an ample supply of cheap food for the people and the army, but also an immense surplus for foreign shipment, which will keep the balance of trade in our favor or but slightly against us. Abundant crops two years in succession is an unusual occurrence in this country, and the coincidence at this time is remarkable.

The following details of the leading branches of business will show more clearly the course of trade.

RIVER TRANSPORTATION.

Although there was a good stage of water in the river up to the 1st of August, shipments by steam boat have been comparatively light, shippers preferring the more speedy and certain shipments by railroad. Freights by river have ruled low, as will be seen by the following table showing the prevailing rates during the boating season to the various points:

TO PITTSBURGH.

Whisky and oil per barrel.....	\$0 50
Pork.....	40
Flour, per bbl.....	30
Pound freight, per 100 lbs.....	12½@15

TO ST. LOUIS.

Whisky and oil per barrel.....	60
Pound freight, per 100 lbs.....	25
Stoves.....	30
Ale.....	50

TO NASHVILLE.

Whisky and oil per barrel.....	1 50
Pound freight, per hundred lbs.....	60

TO CAIRO.

Whisky and oil per barrel.....	50
Pound freight per 100 lbs.....	20

The number of boats built at this point the past year was six, with an aggregate tonnage of 1,764 tons, against 11 in 1860-61, with tonnage of 3,327, which was about half that of 1859-60, but about equal to that of 1858 and 1859.

The number of boats and barges plying between this and other ports was 225, with a tonnage of 52,512 tons, against 318 of 73,885 tons in 1860-61. The whole arrivals for the year amounts to 2,868, against 2,814 last year and 2,928 in 1859-60. As far as arrivals and departures are concerned, the business of the past year was a fair average.

The following table will give a pretty good idea of the comparative movements of the leading articles of commerce for the years ending August 31, 1862 and 1860, the year preceding the rebellion.

	Imports.		Exports.	
	1860.	1862.	1860.	1862.
Alcohol..... bbls.	.....	.....	27,392	52,400
Ale and Beer.... "	6,934	5,861	92,581	19,470
Apples..... "	95,811	98,033	55,462	23,220
Butter..... "	15,269	5,916	4,056	244
"..... Kegs	34,468	14,690	48,268	9,862
Beef Cattle..... No.	43,182	37,904	20,393	23,467
Barley..... Bush.	352,829	323,260	.....	.....
"..... Burs	.....	.....	47,580	21,026
" Malt..... Bush.	117,593	102,064	209,487	125,051
Boots and Shoes.. Cases	5,944	12,901	36,282	5,738
Beans..... Bush.	20,352	39,260	10,235	28,358
Cheese..... Boxes	227,085	103,861	172,733	59,545
Coffee..... Bags	129,930	107,022	90,165	110,558
Corn..... Bush.	1,340,908	1,708,262	48,867	141,150
Candles..... Boxes	.....	.....	175,226	245,997
Coal..... Bush.	17,600,000	8,500,000	.....	.....
Flour..... Bbls.	517,339	58,245	478,308	460,574
Hay..... Bates	50,547	58,190	3,449	35,278
Lard and Lardseed	.....	.....	.....	.....
Oil..... Bbls.	24,844	24,025	50,846	58,465
Leather..... Bbls.	19,626	27,758	24,018	30,461
Molasses..... Bbls.	91,807	21,865	51,814	28,559
Oats..... Bush.	894,516	1,328,950	111,823	459,851
Hog Products..... Hogs	434,189	475,467	.....	.....
Bacon, Hhds.	4,062	10,062	52,537	39,458
Pork, Tons.	3,862	3,879	39,833	40,915
"..... Boxes	.....	.....	19,104	76,549
" Bbls.	25,456	46,993	104,347	89,363
Pork, lbs.	23,350,922	28,719,604	345,932	1,052,393
Lard, Bbls.	47,499	99,083	60,652	130,599
" Kegs	11,319	31,582	53,707	61,332
Rye..... Bush.	131,487	247,187	59,177	94,432
Sugar..... Hhds.	40,531	16,168	32,433	29,577
" Bbls.	37,950	67,345	.....	.....
Salt..... Bbls.	119,751	162,857	59,046	87,211
" Sacks	61,058	69,350	12,302	23,703
Tobacco..... Hhds.	6,261	31,944	4,760	2,955
" Bales	7,239	13,148	5,160	7,928
" Boxes & Kegs	49,552	37,813	49,882	75,968
Wheat..... Bush.	1,037,118	2,174,924	321,493	1,293,680
Whisky..... Bbls.	433,168	429,036	398,310	238,316

This table exhibits some very curious results. While some branches of trade have fallen off a vast amount, others have increased enormously, so that the aggregate business of the city in exports and imports foots up to a larger amount than in the previous year. The following is the estimated value:

Imports last year.....	\$103,292,893
" year previous.....	90,198,136
Increase.....	\$13,094,759
Exports last year.....	\$76,449,862
" year previous.....	67,023,126
Increase.....	\$9,426,736

Showing a total increase in the year's business of more than twenty-two and a half millions of dollars. This, with a big war in hand, is certainly a gratifying result.

Cincinnati has enjoyed the reputation of

being the largest pork market in this country. She can also lay claim to being among the largest, if not the largest, market for whisky in the world. The total imports of alcohol and whisky, for the year, reduced to proof gallons amounts to 24,131,000 gallons. The exports for the same time 17,894,000 gallons. The total annual production of proof spirits in the United Kingdom is set down at 32,000,000 gallons. It will be seen, therefore, that Cincinnati handles three-fourths as much proof spirits as is annually produced in England, Scotland and Ireland. Hurrah for the Queen City!

RAILWAYS OF GREAT BRITAIN.

RECEIPTS AND EXPENSES FOR 1861.

The London Money Market Review of August 2nd contains a statement of the revenue and expenses of the railways of Great Britain for 1861, as far as it could ascertain them. Many of the roads give the half yearly account, and two give only the account for the month of June. But the expenses and the per cent. of expenses to receipts is given for the corresponding time; so that although the table may not give the accurate sum total for a definite period, yet each road is correctly given for the time reported, and the per cent. of working expenses to receipts is correct for the whole.

R. R. Rev. Acct. 1861	Gross rec'pts	W'king Ex-Per ct. penses. on receipts.
Bristol & Exeter, half year's acct.....	£185,507	£93,080 50.18
Caledonian, half years acct.....	411,305	185,937 45.20
Cork & Brandon, half year's acct.....	9,015	4,180 46.37
Dublin & Drogheda, half year's acct.....	50,097	22,510 44.93
Dublin, Wicklow and Wexford, half year's acct.....	63,043	22,862 36.26
Dundalk & Enniskillen half year's acct.....	48,589	20,383 41.93
Dundee, Perth & Aberdeen, June do.....	28,365	13,280 46.82
Eastern Cos. etc., do.....	753,009	367,138 48.72
Edinb'g & Gl'go' yearly acct.....	350,223	142,548 40.70
Edinb'g, Perth & Dundee, do.....	197,067	102,106 51.81
Glasgow & S. Western, do.....	422,324	198,081 46.90
Great N'th of Scotland, do.....	93,021	34,061 37.97
Great Northern do.....	1,419,482	731,587 51.54
Gr. South'n & Western do.....	432,833	192,054 42.27
Gr. Western half-year, do.....	1,223,423	478,733 39.13
Lancashire & Yorkshire year.....	1,943,166	896,205 46.07
Lon. & N. West'n do.....	4,579,146	2,333,320 50.96
Lon. & S. West'n do.....	1,141,269	572,546 50.17
Lon., Brighton etc., do.....	948,120	436,983 46.09
Manchester, Sheff'd etc., do.....	694,904	374,084 53.83
Midland do.....	2,142,531	913,430 42.64
Monmouthshire do.....	119,654	63,700 53.24
North-British, half-year do.....	177,915	83,831 47.12
North-Eastern, year.....	2,063,397	946,255 45.86
North Staffordshire do.....	420,349	207,233 49.31
Scottish Central do.....	179,336	78,954 44.02
Scottish N. East'n do.....	207,043	96,206 46.46
South Devon do.....	185,543	105,705 57.00
South-Eastern do.....	1,167,726	566,985 48.55
South Yorkshire do.....	178,733	75,758 42.39
Stockton & Darlington, do.....	412,439	208,298 50.50
Taff Vale half-year.....	126,514	66,133 52.28
Vale of Neath year.....	96,151	54,749 56.94
Waterford & Limerick, do.....	70,379	29,514 41.93
Totals.....	£22,542,390	£10,709,098 47.51

The average cost of working the railways of Great Britain and Ireland amounts, therefore, according to the published revenue ac-

counts of the year 1861, to 47.51 per cent on receipts. In other words the revenue accounts officially rendered show that nearly half the gross receipts arising from railway traffic is absorbed by the cost of conducting it.

SLAVE TRADE IN OHIO.

It is a fact well known to naturalists, that the slave trade and slavery prevail among the ants—one species capturing and enslaving another species.

We are informed by Prof. DAVID CHRISTY that one colony of slave-holding red ants exists in Butler county, near the town of Riley; and another near Oxford, on the farm of Mr. K. Brooks. He has observed the colony near Riley marching in line to the nest of the black ant, and counter-marching again, each red ant bearing along its captive, consisting of the larvæ or full sized young of the black ant. The two lines of march were kept up as long as he had leisure to watch their movements. The other colony was discovered by his son.

A third colony was discovered by Mr. C. in Southern Illinois, during last summer, but under circumstances which prevented his following the warrior class to the nest of their victims.

In this connection we invite attention to the following article:—

THE ANTS.—In his recent book on the Origin of Species, Mr. Darwin, an eminent English naturalist, gives some account of two species of ants, whose custom it is to make slaves of other species. Of these slave making ants, there are two species which differ in some respects in their treatment of and dependence on their slaves. One is the red ant, *formica rubescens*, which inhabits Switzerland, and whose habits were observed by Huber, a son of the celebrated observer of bees. "This ant," says Darwin, "is absolutely dependent on its slaves; without their aid the species would certainly become extinct in a single year. The males and fertile females do no work. The workers or sterile females, though most energetic and courageous in capturing slaves, do no other work. They are capable of making their own nests or feeding their own larvæ. When the old nest is found inconvenient and they have to migrate, it is the slaves which determine the migration and actually carry their masters in their jaws.

"So utterly helpless are the masters, that when Huber shut up thirty of them without a slave, but with plenty of the food they like best, and with their larvæ on purpose to stimulate them to work, they did nothing. They could not feed themselves, and many perished of hunger. Huber then introduced a single slave, and she instantly set to work, fed the survivors, made some cells, and tended the larvæ, and put all to rights."

The other species, the bloody ant, *formica sanguinea*, is found also in England, and was observed by Darwin himself as well as by Huber. Says Darwin, "males and fertile females of the slave species are found only in their own proper communities and have never been observed in the nests of F. San-

gunie. The slaves are black, and not above half the size of their red masters, so that the contrast in their appearance is very great.

"When the nest is slightly disturbed, the slaves occasionally come out, and like their masters, are much agitated and defend the nest; when the nest is much agitated and the larvæ and pupæ are exposed, the slaves work energetically with their masters in carrying them away to a place of safety." They are considered by observers as "strictly household slaves." This specie differs from the other, in doing something to get their own living and in protecting the nests. The "masters," says Darwin, "may be constantly seen bringing in materials for the nest, and food of all kinds."

Sometimes the slave communities resist the filibuster attacks of their masters. Darwin saw a body of the latter, who approached a nest of the former, vigorously repelled by an independent community of the slave species. Many of the latter were killed and carried away as food, but the attack to get any of the pupæ, to rear as slaves, failed.

There is another species, the yellow ant, which though small is very courageous, and attacks courageously its big neighbors. The latter have learned to distinguish the pupæ of the yellow ants, and appeared much terrified when they came across the pupæ, or even the earth from the nest of the yellow ant, and quickly ran away; but after the yellow ants had crawled away, they took heart, and carried off the pupæ.

MONETARY AND COMMERCIAL.

Business generally has been quite brisk during the present week, and a little more activity has been experienced in the money market; the demand for loans, however, is still quite limited, and money is quoted as easy at usual rates of first class borrowers. Currency is somewhat scarce and there has been various fluctuations in gold. The quotations for exchange are:

	BUYING.	SELLING.
New York Sight.....	1/2 dis.	par @ 1/2 prem.
Boston.....	1/2 dis.	par @ 1/2 prem.
Philadelphia.....	1/2 dis.	par @ 1/2 prem.
Baltimore.....	1/2 dis.	par @ 1/2 prem.
Gold.....	16 @ 17 prem.	19 @ 20 prem.
Silver.....	10 @ 12 prem.	15 prem.
Demand notes.....	11 @ 12 prem.	....

The Galena and Chicago Road earned the second week in Sept. .

1861.....	\$51,436
1862.....	42,674

Decrease..... 8,762

The second week's earnings of the Michigan Southern Road in September are \$9,000 greater than in 1861.

The Housatonic Road earned in

August 1862.....	\$26,861 10
August 1861.....	20,326 07

Increase..... \$6,475 63

The increase in August, 1862, was, in freight, \$4,326 25, and in passengers, \$2,148. 78.

The Norwich and Worcester Road earned in August 1862:

Passengers.....	\$19,351 15
Freight.....	19,075 01

Total..... 38,426 16

August, 1861..... 29,531 65

Gain in 1862..... \$8,894 51

The gain in four months over the same time in 1861 is \$30,772 20.

The monthly statement of the Chicago and North-western Road gives the following very favorable result. The earnings for August and for five months from April 1, were:

For 5 mos. fr. Ap'l 1, to Sept. 1,	1862.	1861.	Increase.
Passenger.....	\$130,284 00	\$124,439 32	\$4,835 53
Freight.....	265,772 92	236,302 19	29,470 73
Express.....	4,357 03	3,959 37	397 66
Mail.....	8,479 15	7,967 05	512 10
Miscellaneous.....	1,307 44	306 51	1000 93
Car Mileage.....	992 83	1,979 91	.....
Total.....	\$411,184 27	\$365,954 35	\$46,217 00
Total decrease.....			967 09
Total increase.....			45,229 42

	1862.	1861.	Increase.
Passenger.....	\$32,710 93	\$23,310 07	\$9,400 87
Freight.....	36,011 63	34,103 35	1,908 28
Express.....	887 56	807 03	80 47
Mail.....	1,695 83	1,655 83	.....
Miscellaneous.....		89 07	.....
Car Mileage.....		521 59	.....
Total.....	\$71,305 89	\$60,526 93	\$11,339 62
Total decrease.....			610 66
Total increase.....			10,778 96

The income account on 1st of Sept., 1862, stood as follows:

Balance to credit of income acc., as per report, to April 1, 1862.....	\$552,615 35
By gross earnings from April 1, 1862, to Sept. 1, 1862:	

From passengers.....	\$130,274 90
From freight.....	265,772 92
From express.....	4,357 03
From mail.....	8,479 15
From miscellaneous.....	1,307 44
From car mileage.....	992 83
Total.....	\$411,184 27

Less for operating expenses from Apr. 1, 1862, to Sept. 1, 1862, as per statement attached.....	\$213,075 41
Less for interest on Flagg Trust Bonds, due July 1, 1862.....	9,800 00
Less for interest on Preferred First Mortgage Bonds, due Aug. 1, 1862.....	43,750 00
Less for interest on Appleton Extension Bonds, due Aug. 1, 1862.....	6,440 00
Less for interest on debt.....	5,923 14
Less for exchange.....	597 08
Less for insurance.....	2,500 00
Less for taxes.....	367 01
Less on account Bellville accident.....	310 50
Less for expenses of Directors.....	119 65
Less for expenses of New-York office.....	3,790 15
Total.....	\$286,492 89

Leaving surplus of earnings over operating expenses, and amount paid for interest on bonds, exchange, &c., from April 1, 1862, to Sept. 1, 1862.....	\$124,691 88
Leaving balance to credit of income account, being excess of earning over operating expenses, and amount paid for interest on bonds, exchange, &c., from June 1, 1859, to Sept. 1, 1862.....	\$687,306 73

The Chicago and Rock Island Railroad earned the second week of September:

Second week, 1862.....	\$33,000
Second week, 1861.....	37,900
Decrease.....	\$4,900

The Toledo and Wabash earned the second week of September:

Second week, 1862.....	\$39,192
Second week, 1861.....	30,052
Increase.....	\$9,100

The Cleveland and Toledo Railroad earned the second week of September:

Second week, 1862.....	\$22,353
Second week, 1861.....	20,032
Increase.....	\$2,321

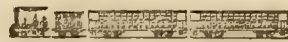
The Michigan Central road earned in the second week of September:

Second week, 1862.....	\$64,954
Second week, 1861.....	47,752
Increase.....	\$17,202

The earnings on the Illinois Central road continue to show a large increase, equal to \$40,000 the second week in September.

The bonds of the Housatonic Railroad Company falling due Jan. 1, 1863, with accrued interest, will be paid on presentation at Ketchum, Son & Co's, 40 Exchange place, New-York, or at the office of the Company in Bridgeport, Ct.

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

Through Distance 280 Miles;

42 Miles Shorter than any other Route.

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M. 7:00 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnett House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without rebilling or transhipment.

JOHN ERANT, JR., Superintendent.

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent, 33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON,
STOCK BROKER,
No. 21 West Third Street,
CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and tax collections.

KNOX & SHAIN,
Engineering and Telegraphic
INSTRUMENT MAKERS,
218 WALNUT ST., PHILADELPHIA.
(Two Premiums 419 by Franklin Institute.)

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
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CINCINNATI O

Philadelphia, Wilm'gton & Baltimore
RAILROAD!



FOUR PASSENGER TRAINS DAILY!

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY.

At 3:30, A. M., Express; 8:15, A. M., Mail; 11:35, A. M., Express, and 11, P. M., Express.

On Sundays at 3:30, A. M., and 11, P. M.

Leave Baltimore for the North and West daily, at 8:30, A. M., Express; 1:04, P. M., Express; 5:20, P. M., Mail; and 7:00 P. M., Express.

On Sundays at 7, P. M., only.

Through connections made for all points at the North, East and West.

WM. CRAWFORD, Agent.

J. T. CRAPSEY,

ATTORNEY AT LAW,

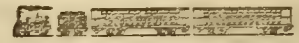
OFFICE:

N. W. Cor. Walnut & Sixth streets,

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CINCINNATI

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS.

CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:00 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—6:30 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the **RIGHT TICKET OFFICE** before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnett House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

BUSH & LOBDELL,
Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

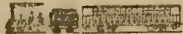
WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and one

Most Reasonable Terms.]

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT

Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wcs. Ag't, Bellaire, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

NEW YORK, BOSTON,

AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6. CHARLES MINOT, Gen'l Sup't

J. W. MORRILL, G. B. BOWERS

MORRILL & BOWERS,

(successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

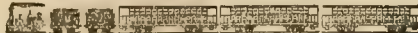
Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that pains will be spared to give entire satisfaction in

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE AND WASHINGTON.

FROM PITTSBURGH TO NEW YORK
ONE TRAIN RUNS DAILY (430 MILES.)
VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburg with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
D. A. STEWART, Freight Agent, Pittsburgh.
CLARKE & CO., Transfer Agents, Pittsburgh.
R. C. MELDRUM & CO., Madison, Indiana.
J. E. MOORE, Louisville, Ky.
W. W. ATKMAN & CO., Evansville, Ind.
R. E. SASS, St. Louis, Missouri.
CLARKE & CO., Chicago, Illinois.
W. H. & E. L. LANGLEY, Gallipolis, Ohio.
G. B. NEAL, Petersburg, Virginia.
HALL & CO., Marietta, Ohio.
H. S. PIERCE & CO., Zanesville, Ohio.
M. DOWELL & McCORM, Portsmouth, Ohio.
R. McNEELY, Maysville, Ky.
J. P. JOHNSTON, Ripley, Ohio.
JOHN TODD, Covington, Ky.
G. L. HEATON, Cleveland, Ohio.
R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York [via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
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H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

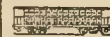
General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:00 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:30 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton.

RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day, Toledo & Day. Huntsville.....	5:30 P. M.	10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	6:00 A. M.	11:10 P. M.
Indianapolis and Terre Haute.....	6:00 A. M.	11:13 P. M.
Decatur, Springfield & Quincy.....	11:30 A. M.	3:40 P. M.
Chicago Night Express.....	6:30 P. M.	16:00 A. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	5:00 A. M.	10:05 P. M.
Seymour Accommodation.....	2:00 P. M.	1:15 A. M.
Louisville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.
P. W. STRADER.
General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

W. H. L. NOBLE.
General Ticket Agent Indianapolis & Cincinnati Railroad.
E. F. FULLER.
General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

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RAILROAD AND CAR

FINDINGS

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MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET

NEW YORK.

ALBERT BRIDGES.

JOSEPH

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.

Tube CLEANERS, Steel Wire and Whalebone BRUSH-

Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enamelled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warm-
ing Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Pia-
za Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.
Steel for Rolls, Dies, Tools, Cannon &c. &c.

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28 Platt Street, New York

N. W. BALDWIN, MACHEW BAIRD.
M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotive En-
gines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned
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THEODORE DEHON,
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EDWIN J. HORNER,

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**LOCOMOTIVE & RAILROAD
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WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

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Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style: working upon the same principle, and making the same stitch, though not so highly finished, at-

Fifty-Five Dollars.

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At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

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Feb 12.

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Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

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Engine and Car Axles, Pump and Piston Rods
Bar of all Sizes,
And all Forgings for Railroad Machinery.

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THE SCHENECTADY LOCOMOTIVE WORKS,

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Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING
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AND OTHER

Railroad Machinery, Tires, etc.

-AND ALSO TO-

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

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Wrought Iron Welded Tubes—from ½ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

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Gas Works Castings, etc., etc.

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:
THURSDAY, OCTOBER 2, 1862.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.
—oo—
SUBSCRIPTIONS—\$3 Per Annum, in Advance.
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Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	6.45 P. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.10 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.10 A. M.
Marietta & Cincinnati—		
Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.
Ohio & Mississippi—		
Mail.....	5.00 A. M.	10.05 P. M.
Seymour Accommodation.....	2.00 P. M.	1.15 P. M.
Express.....	5.00 P. M.	5.53 A. M.
Indianapolis & Cincinnati—		
Mail.....	6.00 A. M.	11.10 A. M.
Chicago Express.....	6.30 P. M.	10.00 A. M.
Dayton & Michigan—		
Toledo, Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.
Kentucky Central— (City time.)		
First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 13 minutes slower than Cincinnati time.

HALIFAX AND QUEBEC RAILWAY.

Nearly a quarter of a century has elapsed since the project of connecting Halifax, N. S. and Quebec, C. E., by railway was started by Lord Durham, the then Governor General of Canada. This was soon after the rebellion which was so promptly throttled by our government through the instrumentality of General Scott, and was designed to render Canada more accessible by the mother country in the event of a war with the United States. This project has again been revived, and probably for the same reasons. This time, however, the movement originates in England, as it is stated the English colonial secretary, the Duke of Newcastle, has, in behalf of the government, agreed to give the Provinces an imperial guarantee of interest, toward enabling them to raise by public loan the requisite funds for building the road.

This action on the part of the home government has been met by the appointment of committees in Nova Scotia and New Brunswick, to confer with the authorities of Canada on the subject, and a meeting was held on the 10th ult., at which the vote of the delegation was unanimous in favor of the immediate prosecution of the work. No particular route was agreed upon; but an understanding was had as to the distribution of the expense among the several provinces interested. Canada is to bear five twelfths, and the lower provinces seven twelfths, of the cost of the road—the bonds being endorsed by the home government. There is no doubt that the necessary funds can be raised on such paper at very easy rates.

Notwithstanding the projection of this road in 1837-8 by Lord Durham, no surveys of the route were made until 1846. In that year Major Robinson made a reconnaissance of five different routes, the longest showing 692 and the shortest 595 miles between Quebec and Halifax. The route most approved is the one via the Bay of Chaleurs, which follows the general direction of the eastern shore of New Brunswick, passing through Isur at the head of the Bay of Fundy, thence over the Cumberland Mountains to Amherst, along the coast to Shediac, through Richibucto and Miramichi to Bathurst. From Bathurst it follows the coast of Bay of Chaleurs to the Restigouche and thence by the Metupedia valley to the St. Lawrence.

The distance by this route is 635 miles, of which 124 are in Nova Scotia, 234 in New Brunswick 277 in Canada. As the Grand Trunk Railway is already built between the Riviere du Loup and Quebec, 110 miles, the proposed line would not probably be extended west of the former point and consequently reduced to 525 miles—less than the distance between Buffalo and Chicago. A shorter route might be chosen; but such a line would not pass through the more thickly settled parts of the provinces, besides the short-

er route runs uncomfortably near the Yankee frontiers of Maine, which, in the event of a war between England and the United States, would greatly imperil the transport of troops and munitions of war, the leading object with the imperial government.

The Duke of Newcastle, in speaking of this road, gave the distance at 350 miles, and the cost at three million pounds sterling. But both these estimates were mere guess-work and not very good guessing at that. Such a road could not be built and stocked in a country like that through which this is to pass, at less than forty thousand dollars per mile, or, say twenty-five millions of dollars, which is only ten millions more than the learned Duke's estimate! The interest on this would not be less than five per cent., which would bring the subsidy up to one and a quarter millions per annum, for such a road would not pay more than its expenses, judging by other and better located roads, for many years to come. Whether John Bull will feel entirely willing to advance the large sum annually, for the doubtful and remotely contingent necessity of transporting munitions of war for the support of Canada, is very questionable. There can be no doubt, however, that this road would be of immense advantage to the country through which it passes, and which is now so completely isolated for at least one half the year. In addition to this, such a road would do much toward uniting the provinces more closely in their social, political and business interests, and consequently strengthen them in all respects as regards colonial prosperity. It would furnish, too, another and a very important link in the great line of projected railway on British territory, from the Atlantic to the Pacific ocean. This route, however, will be greatly incommoded by the heavy snows of the eastern provinces, but probably not to a greater extent than are the roads of Maine, New Hampshire and Vermont. It is to be hoped that this great work may be speedily undertaken and prosecuted to its completion.

THE ATLANTIC AND GREAT WESTERN RAILWAY.

This great work is being pushed rapidly forward. Mr. Kennard, the Engineer-in-Chief, in a late letter to the London bondholders, expresses the opinion, that he will have the whole line completed to Akron and the oil wells by the end of October. Two thousand men are at work upon the road between Meadville and Akron, and the track between Meadville and Corry is more than half completed. Two first class locomotives from Danforth, Cooke and Co., of Patterson, New Jersey, have just been placed upon the line at Ravenna, to assist in laying the track eastward.

The completion of this road will tend greatly in relieving the pressure of eastern bound

freights at Cleveland. Should the managers of this road see fit to adopt the suggestions made in this paper many years ago, of changing their route from Akron to this point, by purchasing the Akron and Millersburg and Wilmington and Zanesville roads, and building the links between Millersburg and Zanesville, and Morrow and Cincinnati, they will have one of the most important and independent routes to the east that has yet been built, for by so doing they tap the finest agricultural portions of Ohio, which have heretofore found outlet by means of broken and disconnected roads to Philadelphia, Baltimore and the Ohio river, and render valuable to roads that are now comparatively worthless for the want of proper and independent termini.

EAST INDIA RAILWAYS.

The enormous efforts that England is making to render herself independent of "all the world and the rest of mankind" for her supply of cotton can be readily seen in the progress and extraordinary outlay for railways in India. Hitherto the great drawback on the cultivation of cotton in that country has not been so much the want of organized labor, as many suppose, as the almost total lack of the means of transportation from the interior to the seaports. This want, however, is being rapidly overcome by the construction of railways upon the grandest scale, of which there are no less than ten principal lines in progress, with an aggregate length of 4,653 miles at an estimate cost of 57,520,000 pounds sterling, or two hundred and eighty seven millions of dollars, or about half the cost of all the railways in the United States! Some of these lines are of vast extent. The East Indian is 1,364 miles, and costs £16,862 sterling per mile. The Great Indian Peninsula is 1,266 miles, and cost £9,475 per mile. The average cost per mile of the whole system is set down at £12,367 sterling, or more than \$61,800 per mile, which is fully fifty per cent. higher than the cost and stock of our first class railways. All these lines having received guarantees of interest from the government; of course there is no difficulty in raising all the funds necessary for their completion and equipment. Indeed no less than forty-three millions of pounds had been paid up at the beginning of this summer, and upward of forty millions of pounds, or \$200,000,000 had been expended.

From the above it will be seen that while the cotton raisers of this country, under the mistaken impression that "Cotton is King," are doing everything in their power, even to the giving to the flames the idol of the worship, for the destruction of the government and constitution that have been their only friends, and protected their pet institution against the just sentiments of all christendom for half a century, the English, their largest customers, are making the most gigantic efforts to render themselves independent of the

South for the great staple on which their prosperity, heretofore, has solely depended. No doubt our southern friends will learn, when too late, that in their insane attempts to coerce the North into further sacrifices upon the altar of negro slavery that they have not only turned their own dish upside down, but knocked out the bottom altogether. It is ever thus. No great wrong can, for any considerable time, be practiced by any people against another without sooner or later having to pay, in their own persons for the injustice done their neighbors, and too with full, and in many instances, compound interest. Our own treatment of the Indians and their subsequent retaliations is a case in point, as well as that of England toward the people of that very India which they are now interlacing with their network of railways, after having been taught the severe lesson that even the poor Hindoo, will turn and strike his oppressor when he is being crushed into the earth.

The effect of opening up the vast interior of India to the arts and sciences of Anglo Saxons can not but prove of great importance to that country, and indeed to the whole Eastern Hemisphere. Its influence upon the commerce and trade of the world can hardly be estimated. It must produce an entire revolution in all eastern affairs.

CAPE COD RAILROAD COMPANY.

ANNUAL REPORT.

The annual report of the above company for the year ending May 31, 1862, has been received, from which we learn that the receipts of the company from May 31, 1861, to May 31, 1862 were:

From passengers.....	\$67,873 70
From freight.....	16,585 86
From mails.....	5,500 00
From express.....	2,000 04
From rent.....	502 38
From wharfage.....	284 25
	\$92,746 32

EXPENSES.

Taxes and insurance.....	\$58 15
Repairs of locomotives.....	4,200 00
passenger cars.....	2,932 40
freight cars.....	5,413 72
station buildings.....	436 86
fences.....	74 88
bridges and wharf.....	194 63
road.....	12,061 46
turntables.....	67 18
Renewals of rails and ties.....	3,897 51
Repairs of rails.....	160 87
Fuel and oil.....	6,420 92
Waste.....	183 34
Gratuities and damage.....	3,642 45
Land bought.....	25 00
Wages of conductors, engineers, firemen, baggage-masters, brakemen, station agents, and switchmen.....	11,886 84
Express train.....	1,408 50
Salaries of president, treasurer, superintendent, clerk, watchmen, law expenses, printing and all other expenses not included in any of the foregoing articles.....	4,603 58
	57,668 09
Net income.....	\$35,078 23
Interest.....	9,160 55
Balance, after paying expenses and interest.....	\$25,897 68
The receipts of the preceding year were.....	\$117,616 33
And the expenses.....	68,074 82
Net income.....	\$49,541 51
And the interest and exchange paid was.....	12,027 40
Balance.....	\$37,514 11

showing a decrease in the last year in net income, compared with the preceding year, of \$14,463.38, and a decrease in net income after paying interest on debt of \$11,616 43.

The assets of the company are:

Balance of construction account.....	\$603,354 55
Real estate not needed for the use of the com'y.....	11,510 98
Fuel and oil on hand.....	2,752 00
Stock in machine shop.....	8,665 00
Old rails on hand.....	3,000 00
Waste on hand.....	90 00
Sleepers on hand.....	928 70
Cash.....	6,942 04
Notes and bills receivable.....	10,115 54
Stock of this Co. unsold, 671 8-10 shares at \$60.....	40,308 00
Total assets.....	\$777,682 81

The liabilities of the company are:

The capital stock 10,000 shares at \$60.....	\$600,000 00
Dividends unpaid, Nos. 1, 2, 3, 4 and 5.....	405 50
Net earnings.....	25,897 68
Interest on bonds of company, accrued to June 1, 1862.....	2,334 00
The funded debt or bonds of the company.....	148,600 00
Interest on assessments unpaid.....	445 63
Total liabilities.....	\$777,682 81

The unfunded miscellaneous liabilities of the company are:

Dividends unpaid.....	405 50
Interest on bonds, accrued to June 1, 1862.....	2,334 00
Interest due on assessments.....	445 63

The company has the following property:

Cash.....	\$6,942 04
Bills receivable.....	10,115 54
Real estate not needed for the use of the road.....	11,510 98
Wood and oil on hand.....	2,752 00
Railroad iron on hand.....	3,000 00
Stock in machine shop.....	8,665 00
671 8-10 shares of the stock of this Co. unsold.....	40,308 00
	\$83,295 56

By the preceding report the debt of the company stood as follows:

Dividends unpaid.....	\$422 50
Interest on bonds.....	3,765 00
Bonds.....	167,900 00
Floating debt.....	14 64
Interest on assessments not called for.....	648 68
Total debt, May 31, 1861.....	\$172,750 82

The debt of the company now stands as follows:

Dividends unpaid.....	\$405 50
Interest on bonds, accrued but not due.....	2,334 00
Bonds due 1861.....	7,100 00
1865.....	141,600 00
Interest on assessments not called for.....	445 63
Total debt, May 31, 1862.....	151,785 13

Reduction of the debt during the year..... \$20,965 69

The receipts of the company for the year ending May 31, 1862, were \$24,870.01 less than in the preceding year, and the expenses were \$10,406.73 less.

In the year ending May 31, 1861 the receipts for passengers were..... \$62,437 25
In the year ending May 31, 1862..... 67,873 79

Decrease in passenger receipts..... \$14,563 46
The receipts for freight in the former year were..... \$26 917 62
In the year ending May 31, 1862..... 18,585 86

Decrease in freight receipts..... \$10,331 86

With the exception of roads which have had transportation for the government, the year has been a very unfavorable one for New England railroads generally, and especially so for this, as the manufacturing establishments along the line have been totally or partially suspended. The strictest economy has been practiced, and while the roadbed and track and rolling stock have been kept in excellent condition, we believe no road has been operated more regularly or at a cheaper rate.

Of the bonds due in December 1861, \$26,300, as per last report, were paid at maturity all but \$7,000, which are still outstanding by agreement, and redeemable at the pleasure of either party. The bonds payable in 1865 amount to \$141,600, making the total amount of bonds outstanding \$148,600, which sum constitutes the whole debt of the company with the exception of incidental items.

In conformity to the vote of stockholders at the last annual meeting, dividend number six, payable in stock on certain conditions, has been canceled.

The reserved fund which has heretofore appeared in the reports, and which has actually been applied to the payment of debts, has been credited to construction account.

It will be seen that the net earnings for the year, after deducting expenses, have been \$35,078.23 or over six per cent. on the amount of stock issued; and the net earnings after payment of interest have been \$25,897.68 or 4 62-100 per cent. on stock issued.

The following table presents the gross earnings of the road, expenses, net earnings, amount of interest paid, and net earnings after the payment of interest, for each year from June 1, 1855, to June 1, 1862, showing that in seven years the road has earned the net sum of \$299,540.37, equal to an average annual dividend of 7 64-100 per cent. on stock issued, or of 7 13-100 per cent. on the whole capital stock.

June, 1856, the debt of the company was about \$330,000.

Year end'd May 31.	Earnings.	Expenses.	Net earnings.	Int. paid.	Int. after pay-ing. int.
1856.....	\$122,749 50	\$70,376 49	\$52,373 01	\$18,782 01	\$33,591 00
1857.....	124,115 21	84,324 31	39,790 90	18,659 72	21,131 18
1858.....	115,378 98	70,892 69	44,486 29	21,570 89	22,915 40
1859.....	110,291 10	64,878 99	45,412 11	15,611 41	29,800 70
1860.....	118,769 61	76,951 70	41,818 54	15,320 74	26,497 80
1861.....	117,616 33	68,074 82	49,541 51	12,027 40	37,514 11
1862.....	92,745 32	57,068 69	35,676 63	9,180 55	26,496 08
			\$299,540 37	\$111,052 72	\$188,487 65

Owing to the state of the times, it has been impracticable to sell, at any thing like its value, the real estate not needed for the use of the company. It will undoubtedly be sold at the first favorable opportunity.

The stockholders declared a dividend of two and a half per cent., or \$1.50 per share, payable on the first Monday of July last.

STEEP GRADES AND LOCOMOTIVES.

(Continued.)

The Pennsylvania Central Railroad mountain grade, from Altoona to Gallitzin, is twelve miles long, and rises, for most of the way, at the rate of 95 feet per mile, the grade being flattened a little on curves, but not enough to equalize the resistance of the straight and curved portions of the line, so that the whole is considered nearly equal to a 100 feet straight incline, or 1 in 52.8. This grade is in favor of the preponderating traffic of the road, the heaviest grades going east being 52.8 per mile.

The freight trains are (or were, when last I was at Altoona,) helped up by pushers, and the present class of freight engines are chiefly 10 wheelers, having 19 inch cylinder and 22 inch stroke. Four of Mr. Winans' "camel-backs," of the same general dimensions as, but of greater weight than, Nos. 102 and 118 on the Baltimore and Ohio Railroad, are also employed.

In a series of trials, made nearly two years ago, a train of eight cars, loaded to a total weight of 124.6 tons, was successively taken up the grade by five different engines, the average speed of each being, as near as may be, 7.57 miles an hour. The following table gives the particulars:

Pennsylvania Central Railroad, Mountain Grade, Altoona to Gallitzin.		Blue Ridge Central Railroad, Mountain Grade, Altoona to Gallitzin.	
Name or number of engine.	Blue Ridge	Name or number of engine.	Blue Ridge
Builder of engine.	Baldwin	Builder of engine.	Baldwin
Diam. of cylinder.	19 in.	Diam. of cylinder.	19 in.
Length of stroke.	22 in.	Length of stroke.	22 in.
Diameter of driving wheels.	38 in.	Diameter of driving wheels.	38 in.
Number of do.	Six	Number of do.	Six
Weight of engine.	61,300 lb.	Weight of engine.	61,300 lb.
Weight of wheels under engine.	32,400 lb.	Weight of wheels under engine.	32,400 lb.
Weight of drivers, lb.	17,750 lb.	Weight of drivers, lb.	17,750 lb.
Grade & rise, lb. per ft.	1 in 52.8	Grade & rise, lb. per ft.	1 in 52.8
Horse power at 7.57 m. pr. hour or 666 ft. per minute.	183	Horse power at 7.57 m. pr. hour or 666 ft. per minute.	183
Equivalent pressure per sq. in. on pistons throughout stroke.	55.4	Equivalent pressure per sq. in. on pistons throughout stroke.	55.4

If, in the above case, any engine was overworked, it was the number 139, the smallest of the five, and in which an average effective pressure of 7 1/4 lb. per square inch on the pistons was maintained throughout the stroke to do the work. The consumption of fuel by

this engine was excessive, being one half greater, for the same work, than that for either of the other engines. The performances of the other engines may be considered as representing their ordinary service.

The Blue Ridge has been so far altered from its original construction as to increase its weight two or three tons, but the dimensions of its cylinders and driving wheels are yet the same as those of a considerable number of engines built by M. W. Baldwin and Co. for the Cleveland and Pittsburgh, Louisville and Nashville, and other roads. One of these engines, the Etna (19 inch cylinders, 22 inch stroke, six 49 inch driving wheels and a truck, and weighing 63,000 lb. with 43,000 lb. on drivers) is reported to have drawn on the 1st of August, 1857, on the Cleveland and Pittsburgh Railroad, fifty 8 wheel cars, weighing, with freight, 756 1-4 tons, or, with engine and tender, 800 tons, up a 40 feet grade (1 in 132) two miles long. The gravity of 800 tons on this grade would be 13,576 lb. and as the weight of the engine bore but a small proportion to that of the whole train, and as the speed must have been very slow, the friction of the train may be taken as low perhaps as 7 lb. per ton. Even at this limit the total resistance on the grade would have been 118.3 lb. per square inch on the pistons! This result was communicated to me by letter from the Cleveland and Pittsburgh Railroad office, in September, 1857, the details being given with much minuteness (thus, the weight of cars and load = 1,593,103 lb. &c.,) and if it were really accomplished it is, I believe, the greatest feat of locomotive traction ever achieved since the first use of railroads. There is nothing so extraordinary in an average pressure of 118.3 lb. per square inch on the pistons, provided 130 lb. or 140 lb. are kept up in the boiler; but the proportion of the adhesion to weight on drivers may be open to doubt. I have, however, the most irrefragable proof that the adhesion is often 35 per cent. and even 38 per cent. of the weight on the drivers, on a clean dry rail and without sand. Mr. George Rennie's experiments upon the friction of wrought iron on wrought iron under considerable pressure, shows that the coefficient rises to above .4, and if the iron be allowed to be abraded—and especially if sand be used—it may rise to more. W. R. Casey, Esq., published, many years ago, in the *American Railroad Journal*, facts which appeared to be conclusive as to the adhesion occasionally rising to one half the weight; and Ellwood Morris, Esq., of the Franklin Institute has taken up and illustrated the same statement. With this digression I leave this wonderful exploit [of the big Baldwin engine on the Cleveland and Pittsburgh Railroad, having mentioned it more to point out how far short of her full power the Blue Ridge, of the same dimensions, must have been worked in the Pennsylvania Central trips, than for any other purpose. On the Mine Hill and Schuylkill

Haven Railroad, with eight miles, averaging 90 feet rise per mile, a portion being 91 feet per mile, Baldwin's engines are used. The largest have 19 inch cylinders, 22 inch stroke, and eight 43 inch wheels, bearing the whole weight of 30 tons. (The dimensions are the same as those of the Winans engines.) The load is all down grade, but the engine has to take back seventy-five empty cars, weighing 187½ tons, the total resistance of engine, tender, train, taking friction, etc., at slow speed, at 8 lb. per ton, being 11,377 lb., equal to 61.6 lb. per square inch on the pistons throughout their stroke.

On the Delaware, Lackawanna and Western Railroad, with 75 feet grades, for some miles up which the loaded coal trains have to be drawn, the most of the engines have 18 in. cylinders, 24 inch stroke and 4 feet driving wheels, in some cases the whole weight being borne on six wheels and a truck. Seven of the six wheel engines, with 18 inch by 24 inch cylinders, were built by the New Jersey Locomotive and Machine Works, at Patterson New Jersey, upon my designs and under my superintendence. The first was a wood burning engine, the other six were coal burning engines, with, I believe, the largest boilers ever made for any locomotives in America. These engines are worked up to their full power. I had intended at first to put 20 inch cylinders in the coal burning engines, and it was admitted afterwards by the engineers and other officers of the road that it was by a mistake that I had been overruled in this intention. Mr. Winans has two engines on the road with cylinders of the unusual diameter of 22 inches, with 22 inch stroke, and 8 coupled 43 inch wheels. These engines are hard worked, but are short of boiler power.

The New York and Erie Railroad, with its 6 feet gauge, has a succession of 60 feet grades on the Eastern division, and a long 60 feet grade also on the western slope of the ridge dividing the waters of the Delaware and Susquehanna. The Western division has long stretches of 40 feet grades against the trade and 52.8 feet downwards towards New York. The standard class of freight engines for the road is an inside cylinder pattern, with four 5 feet drivers and a truck, the cylinders being 18 inches diameter, stroke 20 inches, the whole weight being 67,000 lb., and weight on drivers 42,000 lb. On the Eastern divisions, short trains are run in convoys, long trains being run on the nearly level Delaware and Susquehanna divisions, and pushers being employed on each side of Gulf Summit. In August, 1855, I was requested by D. C. McCallum, Esq., then General Superintendent, to take charge of an experimental train to be run over the whole length of the road, from Dunkirk to Piermont and back, a total distance of 890 miles. The results, although exceeding the every-day working of the line, deserve some notice in the present connection. A complete series of levels had been

taken over the whole road in 1854, and I had the level books for some time in my possession, giving the elevation above tide for every 100 feet, (the American "chain"—it is 66 feet here) along the line, the number of "leveling stations" being nearly 24,000. There was no mistake, therefore, as to the rate of inclination of the grades. I had a new outside cylinder engine, No. 219, 17 inch cylinder, 24 inch stroke, four 5 feet driving wheels and truck, whole weight of engine in running order 66,050 lb., weight on drivers, 40,050 lb. The engine was built by the New Jersey Locomotive and Machine Works. A train of 100 eight wheel cars, all previously overhauled and put in the best running order, was provided, all the cars being loaded with pine lumber. Each car was accurately weighed, and in the course of the experiments, the gradient of friction of the engine, tender and train was ascertained to be less than 16½ feet per mile, the friction being under 7 lb. per ton. The engine and tender were run slowly, with a mean pressure of 3 lb. per square inch on the pistons, equal to 347 lb. tractive power or 7.3 lb. per ton of their weight.

Thirty of these cars, making, with engine and tender a gross load of 516 tons, were taken up a long grade from Lake Erie at the rate of 39 feet per mile, the rate of speed being 6½ miles an hour. The gravity being 8,500 lb. and the friction at 7 lb. per ton—3,612 lb., the total resistance was 12,112 lb., equal to upwards of 30 per cent. of the weight on the driving wheels, and equal to an average pressure of 104½ lb. per square inch on the pistons throughout their stroke. At the speed of 572 feet per minute, 210 horse power were exerted. On another part of the Western division, 25 cars were taken up 4 miles of 39 feet grade, at a mean speed of 10.6 miles per hour—933 feet per minute. The weight of engine, tender and train was 438 tons, the gravity of which was 1,179 lb. and taking the friction at 8 lb. per ton (the speed, when the friction was found to be under 7 lb., being very slow, the whole resistance would be 10,683,) the equivalent mean pressure on the pistons being 92.4 lb. per square inch, and the horse power 302. The boiler pressure was seldom below 130 lb., and generally above it. On the Eastern division, 30 of the cars were taken up 3 miles of 45 feet grade in 17½ minutes or at the rate of 10.28 miles per hour. The whole weight being 514 tons the gravity was 9,814 lb., and the friction at 8 lb., making 13,926 lb. in all, which, overcome at 904 feet per minute, represents 380 horse power, and corresponds to an average pressure of 120½ lb. per square inch on the pistons, the boiler pressure being 145 lb. per square inch. It will be seen that the resistance (the gravity being exactly known and indisputable, and the friction the least which we should be justified in estimating) amounted to 34½ per cent. of the weight on the driving wheels, and yet no sand was used. On 4 miles of 60 feet

grade, on the Eastern division, 24 cars,—the whole weight of engine, tender and train being 410 tons nearly,—was taken up at 6½ miles an hour, the gravity being 10,484 lb., and the friction, at 7 lb., 2,884, gives 13,368 lb., a less performance than that last mentioned.

The greatest effort was exerted in hauling the whole experimental train of one hundred cars (over a half a mile long, and weighing 3,423,150 lb., or, with engine and tender 1,571 tons) at 5 miles an hour, over 5 miles of road, rising in all 31 feet, or say, 6 feet per mile. The gravity was unmistakably 3,993 lb. The friction could not have been more (as I had previously ascertained) than 7 lb. per ton; and as there was no curve of a less radius than 5,730 feet in the whole distance, I take it that the total average resistance per ton of the whole moving mass, and exclusive of gravity, was but 7 lb. at 5 miles an hour. For this gives 10,997 lb., making, with gravity, 14,995 lb., equal to 39½ per cent. of the weight upon the driving wheels. No sand was used during any part of this effort. Were I to estimate an average resistance of 10 lb. per ton, which is an ordinary estimate, I should have had a traction of 19,708 lb. equal to 49 per cent of the weight on the driving wheels! But as this traction would require that more than an average pressure of 170½ lb. per square inch were maintained upon the pistons, throughout their strokes, and as I never had above 145 lb. in the boiler, I prefer the estimate of 7 lb., which would correspond to 130 lb. on the pistons, the horse power exerted being 200. I found, moreover, that the whole train of 100 cars ran upon one 5 mile level at 9.23 miles an hour, and upon another level of the same length at 9.7 miles an hour, and as the engine was not working so heavily then as before, I take the resistance, at these speeds, as 8 lb. per ton, or 12,568 lb. in all, overcome at, say, 832 feet per minute (the average 9.23 and 9.7 miles an hour), equal to 316½ horse power and to 108.7 lb. mean pressure on the pistons. Five miles, rising 75 feet in all, or 15 feet per mile, were run in exactly half an hour with 53 cars, the whole weight being 735 tons. The gravity being 4,676 lb., and the friction at 8 lb., 5,880 lb., the whole resistance was 10,556 lb., at 880 feet per minute—281 horse power and 91.3 lb. on pistons. In the latter case there were several curves of 1,446 feet radius, and it is not improbable that the resistance exceeded 8 lb. per ton at 10 miles an hour.

The 800 wheels on which the experimental train ran were, some of them, 33 inches and the rest only 30 inches in diameter, the journals being all 3½ inches in diameter, and inside the wheels instead of outside, as on most roads.

The engine took its steam into the cylinders remarkably well, an indicator diagram showing no back pressure or compression, worth mentioning at slow speeds, the valves work

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	64	48	\$ 13,111,800	\$ 10,781,833	566,077	3,922,203	2,305,788	Sept. 30, 1880	Maryland Sterling Mortgage.....	3,000,000	5			
Baltimore and Ohio.....	Md.	64	380							".....	2,500,000	6	95	1885	
do do										".....	700,000	6	84	1880	
do do										".....	1,124,500	6	90	1875	
do do										".....	1,000,000	6		1867	
do Washington Branch.....	Md.	30		1,650,000						".....	791,000	7	55	1866	
Bellefontaine and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	1st Mortgage.....	160,000	7		1870	
do do										2d ".....					
Buffalo and State Line.....	N.Y. & Pa.	122	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	132	75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	96		3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	367,000	6	100	1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,350	Aug. 1, 1859	1st Mortgage.....	450,000	7	62	1861	
do do										1st ".....	800,000	7	80	1864	
do do										2d ".....	800,000	7	64	1865	
do do										3d ".....	950,000	7		1865	
do do										4th ".....	1,365,800	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	100	1865 & 1870	
do do										2d ".....	600,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,320	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7			
do do										2d ".....	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report	received.					3d ".....	1,000,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.....	1,250,000	7	80	Feb. & Aug.	
do do										2d ".....	3,600,000	7	52	Feb. & Aug.	
do do										3d ".....	2,000,000	6	26	May 1.	
Chicago and Rock Island.....	Ills.	68	175	5,603,000	1,397,000		1,104,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	105	1870	
Chicago, Burlington and Quincy.....	"	86	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	110	1863	
do do										" 2d ".....	813,000	8	108	1890	
do do										1st Mor. Chi. & Aur.	399,000			1867	
do do										2d ".....	303,000			1869	
do do										1st "Cent. Mil. Tract	392,000			1864	
do do										2d ".....	245,000			1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
Cincinnati, Hamilton and Dayton.....	Ohio.	99	60	2,155,800	1,356,000		644,928	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d ".....	950,000	7		1880	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d ".....	532,000				
do do										3d ".....	104,000				
Cleveland and Mahoning ..	Ohio.	68		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,509				
do do										1st Mortgage.....	850,000	7	80		
do do										2d ".....	459,000	7			
do do										3d ".....	344,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	25	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7	96	1873	
do do										3d 2d Ex.....	1,163,000	7	81	1865	
do do										4th 3d Ex.....	1,154,100	7	64		
Cleveland and Toledo.....	Ohio.	53	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jan. 1st Div.	359,000			1867	
do do										1st " " 2d Div.	263,000			1872	
do do										2d " ".....	265,000			1862	
do do										1st " Tol. Nor. & Cleve	521,000			1863	
do do										2d " ".....	293,300			1863	
do do										Junction Income..	44,500			1862	
do do										C. & T. Income.....	300,000			1864	
Cleveland, Columbus and Cincinnati..	Ohio.	121	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000			1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	125	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 13, 1860	1st Mortgage.....	564,000		99	1861	
do do										2d ".....	303,000			1862	
Columbus and Xenia.....	Ohio.	105	54	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700			1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666	2,512,000	292,267	375,002	212,107		2d ".....	2,212,000	8			
do do										1st Mortgage.....	304,000		50		
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,023	3,565	Aug. 31, 1860	1st Mortgage.....	2,500,000		90	1875	
Detroit and Milwaukee.....	Mich.	186		No report						2d ".....	1,000,900	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	798,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		986,061	1,219,100	249,868	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.											
do do										1st Mortgage.....	400,000				
Galena and Chicago Union.....	Ills.	73	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	2d ".....	18,000				
do do										1st Mortgage.....	1,993,000		104	1862 & 1863	
do do										2d ".....	1,520,000		100	May 1, 1875	
Great Western ..	Ills.	175		1,600,000	2,391,000		435,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report					Land Mortgage...	5,000,000				
Greenville and Miami.....	Ohio.	32		300,000		75,000	63,141	13,573		Mortgage Conv.....	1,354,000		26		
Hannibal and St. Joseph.....	Mo.	206		1,041,066	10,354,000	220,346	996,907	512,933	Sept. 1, 1860.	1st Mortgage.....	927,000	6	30	1873	
do do										1st Mortgage.....	4,000,000	6	110	1869 & 1870	
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	2d S. F.	2,000,000	7	103	1870	
Hudson River.....	N. Y.	51	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	3d ".....	1,840,000	7	104	1875	
do do										Optional.....	38,000			1868	
Illinois Central.....	Ills.	63	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Construction.....	12,885,000	7	100	1875	
do do										".....	4,113,000	6	97	1875	
do do										Debentures.....	42,740				
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000				
do do										2d ".....	578,000	10			
do do										Income.....	33,700				
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000	7		1866	
do do										2d ".....	400,000	7			
Indianapolis, Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort...	200,000				
do do										1st Mortgage.....	649,984				
Iowa Central Air Line.....	Iowa.			245,000	755,000	No report	No report			2d ".....	314,000				
Iron.....	Ohio.	13		118,865	50,000	No report	No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	123,797	Dec. 31, 1860.	1st ".....	249,000	7	75	1861
do										2d ".....	392,000	7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st ".....	260,000	7		
do										2d " Conv.....	1,000,000	7		
do										3d ".....	600,000	7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	90,000		89	
do										2d " E. D.	1,000,000			
do										1st Land Grant W D	4,000,000		21	
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.	29		514,433	130,000		108,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883
Little Miami.....	Ohio.	65					1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000			
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		245,910	93,679	June 30, 1861	1st Mortgage.....	248,000			
do										1st Mortgage.....	2,000,000	7		
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000			
do										1st " Memphis Br.	500,000			
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,897	371,402						
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,225,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861
Marietta and Cincinnati.....	Ohio.	208		8,561,213	196,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv.....	2,500,000	7		1868
do										2d ".....	2,000,000	7		
do										3d ".....	1,500,000	7		
do										Sterling Income.....	333,000	4		
Michigan Central.....	Mich.	68½	284	6,057,724	7,908,489	125,000	2,126,699	910,169	May 31, 1861	Domestic.....	928,617	6	98½	1872
do										1st Mortg. Sterling.....	467,483	8	84	1869
do										1st " Conv.....	500,000	8	96	1860
do										1st " unconv.....	250,000	8	106	1869
do										1st " Dollar Conv.....	2,598,000	8	108	1882
do										1st " S. F. Conv.....	4,153,000	8	99	1860
Michigan South'n & North'n Indiana	Mich. &	31½	246	9,018,200	9,714,704	437,886	2,075,450	1,039,820	Mar. 31, 1861.	Mort. Mich. So.....	991,000		103	1861
do										" Nor. Ind.....	985,000		100	1868
do										" Goshen Line.....	1,168,000		101	1885
do										S. F. Toledo.....	2,850,000		89	1877
do										2d Mortgage.....	2,465,000			
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d ".....	200,000	7		
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8		
do										2d ".....	600,000	8		
Milwaukee and Prairie du Chien.....	Wis.	34	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7		1801
Milwaukee and Western.....	Wis.	71		No report										
Mississippi and Missouri.....	Iowa,	55		No report						1st Mortgage Conv.....	1,000,000	7	96	
do										2d " S. F.	400,000	8		
do										Oskaloosa Div.....	1,425,000	7		
do										Land Grant.....	7,000,000	7		
New Jersey.....	N. J.	34		4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000		102½	
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.					
New York and Erie Pref.....	N. Y.	68½		Sold under mortgage			5,580,916	1,979,408	Sept. 30, 1860	1st Mortgage.....	3,000,000		110	
do		38½								2d ".....	4,000,000		110	
do										3d ".....	6,000,000		104	
do										4th ".....	4,900,000		93	
do										5th ".....	1,792,500		82½	
New York and Harlem Pref.....	Conn.	40½	138	5,717,190	6,055,752	.....	1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	103½	1873
do		16								2d ".....	1,000,000	7	101	1864
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	7	94	Dec. 1, 1866
do										".....	978,000	6		Oct. 1, 1875
New York Central.....	N. Y.	93½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.	7,925,000	6	101	May 1, 1883
do										Mortgage.....	3,000,000	7	103	June 15, 1864
Northern Central.....	Md.	138		2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,086,500	6		1883
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6		
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased.	9,880,000	2,330,030	898,817	153,660	May 1, 1861.	1st Mortgage.....	2,193,500			
do										3d ".....	316,995			
do										Construction.....	4,637,920			
do										Income.....	3,591,185			
Ohio and Mississippi, Western Div....	Ills.	148		.....	3,292,403		No report			State Loan.....	7,000,000			
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" " S. W.....	2,800,000	6		
do										Construction.....	4,500,000	6		
Pennsylvania.....	Pa.	339		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.....	4,903,000	6	104½	1889
do										2d ".....	2,319,000	6	98½	1875
do										2d " Sterling.....	1,537,440	6		1873
do										State Works.....	7,200,000	5	89	
Peru and Indianapolis.....	Ind.	74		1,100,090	820,000	80,000	No report			1st Mortgage.....	2,300,000	6	99½	1884
Philadelphia, Wil. and Baltimore.....	Del.	98		6,600,000	2,390,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863
do										1st Mort. O. & P.	1,000,000	7	96	1865
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,135	1,757,273	2,335,353	761,555	June 30, 1861	2d ".....	750,000	7	83	1866
do										1st " O. & I.	1,000,000	7		1872
do										2d ".....	380,000	7		1873
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000			
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,338	220,850	68,438	May 10, 1861.					
Sandusky, Dayton and Cincinnati. ..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856
do										".....	997,000	7		1866
do										".....	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1866
do				404,975	500,000	100,000	110,200	53,100						
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	300,000			
do										2d ".....	450,000			
Steubenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d ".....	900,000	7		1865
do										1st Mortgage Conv.....	1,000,000	7	110	1862
do										2d " Conv.....	2,000,000	7	92	1863 & 1870
do										1st " Bel. & Ill.	517,000	7		1873
Terre Haute and Richmond.....	Ind.	100	73	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	92	1866
do										1st Mortgage.....	3,400,000	7	92	Aug. 1, 1865
do										2d ".....	2,500,000	7	70	Nov. 1, 1878
Toledo, Wabash and Western.....	Ohio & Ind	243		2,123,506	5,908,049	52,389	233,545			Mort. Coupons.....	90,000	7		1860 to 1865

The Secretary of the Treasury also proposes to contract another domestic loan of about \$800,000, to supply deficit and meet the balance of the public expenditures of the current year, by issuing Treasury notes payable at from one to eighteen months, bearing five per cent interest.

The money loaned by the Government, which is to be gradually collected, will be sufficient to meet the payments of these notes as they fall due.

The Secretary thinks that the present condition of the revenue will gradually improve so as to entirely recover from the effects of the past convulsions of the country.

The railroads being nearly exclusively the property of the government they will soon become a source of great revenue, as they are far advanced toward completion.

The new tariff to go into operation on the 1st of January next is expected to increase the revenue. The system adopted is relied upon as an infallible means to prevent frauds against the revenue. It is not understood from the report of the Secretary what those means are, but we usually see the greatest financiers of the Chase school of high duties find themselves and their countries often disappointed.

Instead of the large figures in hard coin expected from the high tariff, they invariably meet with an appalling decline in the receipts. Goods so heavily taxed become rather shy, and by no means wish to pay their respects to Custom-Houses when they become hard customers.

The exports of Chili during the years 1860 and 1861 were:

Produce.	1860.	1861.	Inc.	Dec.
Coal.....	\$274,011	\$336,099	\$62,088	....
Barley.....	443,525	446,728	3,203	....
Jerked beef..	120,808	75,321	....	47,985
Copper bars..	5,821,363	5,594,610	....	226,752
Regulus....	3,332,476	3,534,118	255,692	....
Cow hides....	983,955	628,009	....	455,956
Vermicelli...	42,523	31,051	....	10,470
Beans.....	42,617	31,833	....	11,586
Navy bread..	168,251	101,105	....	67,127
Flour.....	1,170,351	1,326,913	156,562	....
Wool ass't'd.	464,568	207,648	....	168,920
Timber, ass't'd	167,562	152,071	....	16,511
Silver ore..	906,201	821,568	....	81,642
Copper and silver reg- ulus.....	573,280	221,223	....	352,459
Copper ore..	4,386,907	1,923,116	....	2,463,792
Nuts.....	68,077	45,604	....	22,474
Silver bars..	1,534,066	1,308,080	....	225,986
Silver refuse (chafalonía)	4,746	11,018	6,272	....
Copper ref. (retalla)...	86	209	....	664
Wheat.....	1,034,501	1,639,497	584,995	....
Total....	\$31,359,653	\$18,476,976	\$1,068,618	\$4,151,501

A RAILWAY THROUGH THE PYRENEES.

The successful completion of a Spanish railway across the Pyrenees, and the first which has actually passed over either of the two greatest of the mountainous ranges of western Europe, may perhaps be deemed of sufficient interest in several respects to deserve a passing notice.

On the 21st of August, 1862, the first rail way train, drawn by locomotive engines, crossed the chain of the Cantabrian Pyrenees, over the Northern division of the Tudela and Bilbao Railway, from the seaport of Bilbao to Miranda on the Ebro. On the 22d the Minister of Public Works for Spain made his inspection from Miranda to Bilbao, returning on the 23rd, the passage across the mountains being made by trains running also in both directions each day. The distance from Bilbao to Miranda is about sixty-six English miles, of which more than forty miles are in ascending from the coast to the summit,

which is 2,163 feet above the sea being the lowest pass in the whole range of the Pyrenees. The northern slopes are almost invariably steep. Here the difficulties to be overcome are concentrated. In the present case they have been surmounted by winding along the shoulders of the mountains with heavy works of excavation, tunneling and embankment's, until the railway resembles a turnpike road more than such a line as is usually considered should be made to enable a locomotive engine to travel over it with speed and safety, and dragging heavy loads. The average rate of ascent from the sea is 54 feet per mile; the *maximum* is 76 feet. The predominant curvature has a radius of 300 yards only, and the curves are constantly reverting. There are two points on the line at the entrance of the Concha or Basin of Ordima (the ancient capital of the province of Biscay,) distant only 600 yards apart, measured horizontally across the neck or gorge of the basin, which are distant fully eight and a half miles from each other in traveling along the line and which differ 456 feet in level. A mechanical description of the railway would be out of place here, and it would occupy pages to paint in words the grandeur of the scenery, seen as it was seen, in full perfection, under the beautiful sunny sky which beamed over each day's passage of the trains. The changes of view were almost as rapid as the motion of the locomotive engine, owing to the tortuous character of the course, forced upon the engineer by the rugged country traversed. The last glimpse of the northern landscape which the passengers had was over the Gijuli waterfall, and down to a depth of 400 feet to the bottom of the ravine into which it fell; after which the carriages rushed into the summit tunnel to emerge into a wide meadow with a gently falling stream; for the descent on the southern side is very gradual, the average rate from the summit to the Ebro being less than 24 feet to a mile. The valley being wide the curves are much easier. The most remarkable point in the descent is the pass or gorge of the Techas, through which flows the river Bazas at the village of Subijana Morillos, where Wellington had his headquarters a night before the battle of Vittoria, in the summer of 1813.

The time occupied by trains between Bilbao and Miranda is two hours and three quarters. To the powerful locomotives of this railway the sharp reversing curves and steep gradients in ascending from the north to the summit appear to make no difference with trains of seven or eight carriages.

On the occasion of the crossing of the mountains on the 22d of August, there was the usual *cortege* of officials meeting the Minister of Public Works and the gentlemen of his party. The usual breakfast was set out, but there were no toasts and no speeches. Upon arriving in Bilbao a small steamer took the distinguished group down to the mouth of the river (Nervion) where a good view was obtained of the deep Bay of Bilbao, where it is proposed to construct a breakwater more than a mile in length, within which nearly 1,000 acres of sheltered anchorage will be attainable—in fact, a safety harbor, so much required at the extremity of the Bay of Biscay.

The southern division of the Tudela and Bilbao railway (which is to be completed by the early part of the year 1863) proceeds eastward from Miranda for nearly ninety miles, always on the right or south bank of the Ebro, for strategic though not for engineering purposes.

The amount expended and to be expended

on the 155 miles of the Tudela and Bilbao Railway is about £2,500,000 sterling. The sixty six miles from Bilbao to Miranda (including twenty miles of the most difficult of railway works known, principally through the Pyrenees,) have cost merely for construction more than £1,000,000; the eighty-nine miles along the Ebro have been made for four-fifths of that sum. The rest of the money has been spent on stations, rolling stock, management, etc. The total with all paid and capital account closed is £16,000 per English mile, and is within the capital of the company. The whole of this capital is Spanish money, mostly subscribed by Bilbao and its commercial connections. Not a share is held out of Spain or the colonies of Spain. No bonds have been issued, nor any mortgages issued. The credit of the company and of its directors stood high enough to procure them all the financial aid they wanted; and they were spared the necessity of having to issue their obligations at the ruinous discount common to other railway companies on the continent. There is a government subvention equivalent to 30 per cent. on the capital.

It should be mentioned that this line joins the Northern of Spain at Miranda on the Ebro, which railway is opened from Madrid to the southern slope of the Pyrenees, near Alazua, about 25 miles northeast of Vittoria, with the exception of a gap of 30 or 40 miles, including the Guadarama Mountains. By this route the Minister of Public Works (Marquis Armigo de Vega,) returned from Bilbao to Madrid in 18 hours, of which only 12 were by railway. When the above gap is closed, as it will be next year, the journey from Bilbao to Madrid will be performed in 14 hours. It will perhaps be some years longer before the Northern Railway of Spain will be completely connected with the French lines at the frontier; but towards the end of next year (1863) there will only remain a portion unfinished equal to four or five hours traveling by diligence across the Pyrenees, forming the only exception as to a through route by railway from Paris to Madrid; and, indeed, the distance between the two capitals may then be traversed in thirty-six hours notwithstanding the above drawback.

In the engineering court in the International Exhibition there is to be seen a very fine and accurate model on a large scale of the Bilbao and Tudela Railroad across the Pyrenees. It has been pronounced by competent judges to be the most perfect topographical and geological model yet exhibited. An inspection will give a better idea of the character of the railway than any description by words. The engineer-in-chief of the railway, as well as of the proposed breakwater, is Mr. Vignoles, F. R. S. The contractor who executed the works through the Pyrenees, and from Bilbao to Miranda, the celebrated Mr. Brassey. The iron for the railway, the engines and vehicles were made in England, as were also nearly all the materials for the station except the mere shell of the building. The chairman of the company is Senor Don Pablo de Epalza, who may be considered as holding the highest rank as a Spanish merchant. The managing director is Senor Monsino, formerly Director General of the Public Works in Spain. He is a member of the Cortes, and one of the commissioners for Spain at the International Exhibition.

On the completion of the Tudela and Bilbao Railway, it will become the great channel through which the corn, wine and oil of Castile, and the rich agricultural provinces west of Burgos and Valladolid as far as Leon, will

find their way for exportation at Bilbao.—*London Times.*

COMMERCIAL POSITION OF THE COUNTRY.

The state of the commercial relations of the United States with other countries is naturally a subject second in interest, both at home and abroad, only to that of the war. For the very year of its outbreak, the gross amount of this trade was nearly \$800,000,000, almost equally divided between imports and exports. There was no civilized country but had a large stake in this vast commerce, while the internal trade of our own was largely dependent upon it, interwoven as was the former with every interest in the land.

More than one-half in value of our exports had been made up of staples furnished by the South. These were instantly cut off, reducing the amount of our exports in an equal degree. The North instantly lost a trade of corresponding value. It would naturally be supposed, under such circumstances, that the commercial position of the Northern States, through which the foreign relations of the South had been conducted, would undergo a shock, which could have no other end than national bankruptcy. Such was a foregone conclusion of foreigners themselves. But remarkable as the event was, the fact was exactly the reverse. So suddenly did our people adapt themselves to the altered condition of affairs, that they reduced their imports so as to bring foreigners so largely in debt that the balance called for the importation of more than \$50,000,000 in specie the past year. The nation went through the year and the crisis most triumphantly, displaying a degree of financial strength quite as astonishing to themselves as to others. The alarm caused by the rebellion was of course excessive. The market value of securities fell off enormously, and no small amount of individual loss and suffering were created. But in the aggregate there has hardly been a year in the history of our people in which they were more favored in all their interests, than in 1861.

We are now advanced in the second year of the rebellion, and can see and judge more accurately of the commercial position and material prosperity of our people. It repeats in its general results the first, and would undoubtedly be still more in our favor, but for the enormous exports of gold in payment of securities held abroad, and sent home for sale. For 1861, up to the end of the second week in August, we imported through the port of New York \$33,000,000 in specie, over our exports. For a similar period of 1862, we exported, over imports, almost the exact amount we imported the year previous. The flow was completely reversed. The exports from this port for the periods named for the years 1861 and 1862 were, exclusive of specie, \$81,716,273 for the former, and \$86,382,735 for the latter; showing an increase of \$4,666,462. The imports, exclusive of specie, for the same time in 1861 were \$81,446,435, and \$106,641,234 for 1862, showing an increase for the past year of \$25,194,799. But it must be borne in mind that the purchase of munitions of war which are all entered at the Custom House, and which have been enormous in amount, appear in the returns for the past year. These are extraordinary, and will not continue, but they undoubtedly very nearly equalled the excess of importations for the year, so that the volume of our exports and imports, exclusive of specie, was unquestionably very nearly equal.

The total value of exports from the port for

the period named for 1862 were \$113,535,178; of imports 107,372,790, showing an excess of exports at this port equal to \$6,162,388, of which specie made up \$36,043,688. We have just about exported the regular product of our mines, leaving still within the country the importations of 1861. But we have shown that extraordinary causes swelled the imports of 1862, which will not occur again. For the commercial wants of the country it is not probable that the imports were much greater for the past than the year previous, while the exports have considerably increased, with every prospect of a still larger increase for the year to come.

Were we not a gold producing country we could not be placed in a stronger position in reference to our foreign trade. In the time of our greatest need and greatest want of preparation, we have kept the balance, arising out of commercial interchanges, largely in our favor. But every day strengthens this position. We have commenced the manufacture of a large proportion (in value) of the articles we have been accustomed to import. We have all the conditions for their manufacture, with abundant capital, and can soon produce them at rates far below what they can be imported for under the present high rates of duties. Our importations will soon be made up of articles which can not be produced with our climate and soil, and which have not equalled, in value, one-third of the ordinary line of our imports. On the other hand our exports consist almost exclusively of raw materials which form the basis of support for the populations and manufacturing establishments of the Old World. Every nation can get along without importing the fabrics of another, but can not without its agricultural products (except in those in which it is self-supporting.) We do not propose to discontinue the use of the tea of China, or the sugar of the West Indies; but we do expect to fabricate, for the future, our cotton and woolen goods and all kinds of iron that we have been accustomed to import. That we have not done so before has been because we could not do everything at once. England can not do without breadstuffs. She will, as she has done, buy in the best market. The people of this country are rapidly getting into a position in which they can undersell all others. Each year improves the system of culture, and cheapens the cost of transportation. Every year certainly must swell the volume of our exports and diminish, relatively, that of our imports. Such results are inevitable, flowing from causes that can not be subverted or overridden. When we add the fact that we are a great gold producing people, and that we have already accumulated vast reserves of the precious metals to meet every contingency, and can count upon a yearly surplus of production of some \$30,000,000 or \$40,000,000 above the wants of our people, certainly no further element is wanting to establish our complete commercial independence of the world, even in the period of our greatest weakness.

The element creating a temporary disturbance is the large amount remitted in payment of sales of securities on foreign account. With the rise in their market value the homeward flow may continue. This is not to be regretted, the greater the amount of securities held by our people the better. The present inconvenience will inure to our advantage, and will prove a substantial benefit, as it is a step further in releasing us from debts, the payment of the interest on which makes no inconsiderable item in our exports of the precious metals.—*Hallett's Financial Circ'r.*

MONETARY & COMMERCIAL.

There is but little if any change to note in reference to monetary affairs. The offerings at the discount houses of paper that is acceptable is exceedingly limited and is readily absorbed at 8@10 per cent. This easy condition of our own money market is a fair index to the condition of all the leading money centres of the country. In the New York market, railroad and state securities have been steadily advancing, and gold has reached 24 per cent. premium.

Exchange is firmer than last week with but a limited demand. The quotations are:

	BUYING.	SELLING.
New York Sight.....	3/4 dis. par	3/4 prem.
Boston.....	3/4 dis. par	3/4 prem.
Philadelphia.....	3/4 dis. par	3/4 prem.
Baltimore.....	3/4 dis. par	3/4 prem.
Gold.....	21 prem.	25 prem.
Silver.....	15 prem.	17 prem.
Demand notes.....	17@18 prem.	....

We give below the report of a committee of New York bankers, who visited Washington City to confer with the Commissioner of Revenue in reference to an exact and specific interpretation of the Tax Law as affecting banking operations.

The undersigned, appointed a committee for the consideration of the United States Tax Law as affecting the business of banks, after a very careful consideration of the subject, beg leave to report the following schedule, approved by Gov. Boutwell, the Commissioner of Internal Revenue, as the result of their labors. The committee take this opportunity of returning to that gentlemen, on behalf of the associated banks of this city, their cordial thanks for the kind and courteous treatment received at his hands during their several interviews with him at Washington.

Geo. S. Coe, A. E. Silliman, J. M. Morrison, Jos. M. Price, R. H. Lowry, Committee.
New York, Sept. 29, 1862.

1. Agreements or contracts other than those hereinafter named, for each sheet or piece of paper upon which the same shall be written, five cents. 05
2. Checks, drafts or orders for the payment of money, payable on sight or on demand, for any sum exceeding twenty dollars, each two cents. 02
3. Inland bills of exchange, drafts, checks, orders drawn upon places other than the place of issue, if payable at sight or on demand, are subject to the same rate of tax, viz: two cents. 02
4. Inland bills of exchange, drafts or orders for the payment of money otherwise than at sight or on demand, and all promissory notes on demand or on time (excepting bank notes):
Exceeding \$20 and not exceeding \$100 05
Exceeding \$100 and not exceeding \$200 10
Exceeding \$200 and not exceeding \$350 15
Exceeding \$350 and not exceeding \$500 20
Exceeding \$500 and not exceeding \$750 30
Exceeding \$750 and not exceeding \$1,000 40
Exceeding \$1,000 and not exceeding \$1,500 60
Exceeding \$1,500 and not exceeding \$2,500 1 00
Exceeding \$2,500 and not exceeding \$5,000 1 50
And for every additional \$2,500, or part of \$2,500, one dollar 1 00
5. Foreign bills of exchange drawn out of but payable in, the United States, and all such bills drawn in but payable out of the United States, "when drawn singly or otherwise than in a set of three or more," and all letters of credit, pay the same rates of duty as in the preceding schedule.
6. Bills of exchange drawn in, but payable out of the United States, "if drawn in a set of three or more," for every bill of each set, not exceeding \$150, or its equivalent, three cents. 03
Exceeding \$150 and not exceeding \$250 05
Exceeding \$250 and not exceeding \$300 10
Exceeding \$300 and not exceeding \$1,000 20
Exceeding \$7,500 and not exceeding \$4,250 30
Exceeding \$4,250 and not exceeding \$3,500 50
Exceeding \$3,500 and not exceeding \$3,000 70
Exceeding \$5,000 and not exceeding \$7,500 1 00
And for every additional \$2,500, or part thereof. 30
7. Bonds of Indemnity, fifty cents. 50
8. Certificates of Stock in any incorporated company each twenty five cents. 25
9. Certificates of Deposit of Bank, Trust Company, Banker, or person acting as such, not exceeding \$100, two cents. 02

Exceeding \$100, five cents.....	05
10. Power of Attorney:	
For sale or transfer of Stocks or Bonds or for the collection of Dividends or interest, twenty-five cents...	25
On proxy for voting at an election, ten cents.....	10
For receiving or collecting rents.....	25
General Powers—for all purposes other than those above specified.....	1 00
NOTE.—General powers will not be valid for the specific objects above named, without the addition of the stamp required therefor.	
11. Protests, each, twenty-five cents.....	25
12. Tax on all Dividends, and on all sums added to Surplus or Contingent Funds.....	3¢ et.
13. Stamps issued for specific instruments can not be used for any other. [See Sec. 86.]	
14. The person using or affixing a stamp must write thereupon the initials of his name, and the date when used [See. 99.]	

The penalty for making, signing, or issuing any instrument, document, or paper of any kind, without the same having thereon a stamp to denote the duty, is \$50, and such paper will be invalid and of no effect. [Sec. 95.]

The certification of checks, already duly stamped, will require no additional stamp for such certification.

The stamp tax upon protests should be added to the expenses thereof.

All dividends or coupons, payable prior to or on September 1, 1862, although paid after that day, are exempt from the operations of the law.

Checks dated or payable ahead are subject to taxation as promissory notes.

Stamps are not required on documents made prior to October 1, 1862, excepting upon foreign bills of exchange, which must be stamped on acceptance.

The Committee recommend, as a simple and convenient method, that the three per cent. tax required upon dividends and surplus profits be deducted by banks in gross form their net earnings before the declaration of dividends. Dividends then declared would be free from tax. The three per cent. thus withheld must be paid to the United States within 30 days from the date on which such dividends are payable, under penalty of \$500 for default. [Sec. 82.]

Stamps must be affixed to all documents by the party issuing the same before presentation at bank, and all documents issued by a bank must be stamped by it before delivery, as required by resolution unanimously adopted at a meeting of Bank Officers, Sept. 15.

Stamps in amounts of \$50 and over, can be obtained of the Commissioner of Internal Revenue, as per schedule hereunto annexed, for which a commission, not exceeding 5 per cent. in stamps, will be allowed.

All checks of a bank upon itself, for payment of dividends or otherwise, and all written papers for facilitating the internal business of banks, are exempt from tax.

Orders to pay dividends are not powers of attorney; but like drafts at sight are subject to the stamp of two cents.

Bills of exchange, drawn in duplicate, must both be stamped.

Stamps may be canceled by an instrument made for the purpose of impressing the initials of the bank or person thereon, to which the date must be added.

The omission to cancel the stamps on checks does not invalidate the checks, but subjects the maker to a fine of fifty dollars.

WASHINGTON, Sept. 25, 1862.

I have examined the foregoing memoranda, and I am of opinion that the specifications conform to the provisions of the excise law, in all essential particulars.

GEORGE S. BOUTWELL,

Commissioner of Internal Revenue.

Until the Government provide stamps, no penalty will be exacted for their omission.

OFFICE OF INTERNAL REVENUE, } Sept. 17, 1862. }

Revenue Stamps may be ordered from this office in quantities to suit the purchasers. Orders should cover remittances of Treasury Notes, or an original certificate of a United States Assistant Treasurer, or designated depository, of a deposit made for the purchase of stamps.

The following commission, payable in stamps, will be allowed.

On purchases of \$50 or more, 2 ¢ centum.
On purchases of \$100 or more, 3 ¢ centum.
On purchases of \$500 or more, 4 ¢ centum.
On purchases of \$1,000 or more, 5 ¢ centum.

On sending orders for stamps, it should be remembered that every stamp expresses on its face its kind as well as its denomination, and that each stamp must be used for the purpose thus specified, and for no other. For instance: Check stamps must be used for the checks alone; contract stamps only on contracts, &c. Revenue stamps will be ready for delivery on the 22d inst. Every correspondent is requested to give the State, as well as town and country, of his residence.

If not otherwise instructed the stamps will be transmitted by mail.

GEORGE S. BOUTWELL,
Commissioner.

Cincinnati and Chicago Air-Line



RAILROAD.

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Through Distance 280 Miles;

42 Miles Shorter than any other Route.

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M. 7:00 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without rebilling or transshipment.

JOHN BRANT, JR., Superintendent.
C. E. FOLLETT,
General Ticket Agent, Richmond, Ind.
S. W. CHAPMAN, Gen. Freight Agent.
33 Randolph Street, under Sherman House, Chicago, Ills.

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Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and tax collections.

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J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,

my21

CINCINNATI

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS.

CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:00 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:20 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison. E. T. at 1:50 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—6:30 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.

W. H. L. NOBLE,

General Ticket Agent.

C. B. COTTON, Cincinnati Agent.

BUSH & LOBDELL,
Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,
MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

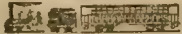
With or without Axles.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best Manner, at the Shortest Notice, and one Most Reasonable Terms.]

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition

The well-earned reputation of this Road for
SPEED, SECURITY AND COMFORT
Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wes. Ag't, Bellaire, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

**NEW YORK, BOSTON,
AND ALL EASTERN CITIES,**
CARRYING THE
Gt. Western United States Mails.

Express Trains leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

The ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

CHARLES MINOT, Gen'l Sup't

W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO.

Are prepared to execute all orders or

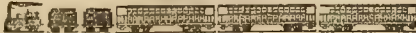
Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that pains will be spared to give entire satisfaction.

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE AND WASHINGTON.

FROM PITTSBURGH TO NEW YORK
ONE TRAIN RUNS DAILY (430 MILES.)
VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL PORTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburg with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburg.

CLARKE & CO., Transfer Agents, Pittsburg.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

W. W. ALKMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.

CLARKE & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

G. B. NEAL, Parkersburg, Virginia.

HALL & CO., Marietta, Ohio.

H. S. PIERCE & CO., Zanesville, Ohio.

McDOWELL & McCORM, Portsmouth, Ohio.

R. McNEELY, Maysville, Ky.

J. P. JOHNSTON, Ripley, Ohio.

JOHN TODD, Covington, Ky.

G. L. HEATON, Cleveland, Ohio.

R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Allentown, Pa.

L. L. HOUPP, Gen'l Ticket Agent, Philadelphia.

H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:00 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton.

RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day, Toledo & Day, Huntsville.....	5:20 P. M.	10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves Sunday Night in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	6:00 A. M.	11:10 P. M.
Indianapolis and Terre Haute.....	6:00 A. M.	11:13 P. M.
Decatur, Springfield & Quincy.....	11:30 A. M.	3:40 P. M.
Chicago Night Express.....	6:30 P. M.	16:00 A. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	5:00 A. M.	10:05 P. M.
Seymour Accommodation.....	2:00 P. M.	1:15 A. M.
Louisville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES slower than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Om nibuses call for passengers as usual.

P. W. STRADER,
General Ticket Agent L. M. & C. X., and C. H. & D. Railroads.

W. H. L. NOBLE,
General Ticket Agent Indianapolis & Cincinnati Railroad.

E. F. FULLER,
General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET

NEW YORK.

ALBERT BRIDGES.

JOHN C.

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.

Tube CLEANERS, Steel Wire and Whalebone BRUSH-

Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enamelled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warm-
ing Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Pia-
za Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.

Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,

28 Platt Street, New York

N. W. BALDWIN,

MATHEW BAIRD.

M. W. BALDWIN & CO. ENGINEER'S

BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those
interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for
which they may be required, by the use of one, two, three or
four pair of driving wheels; and the use of the whole, or
so much of the weight as may be desirable for adhesion;
and in accommodating them to the grades, curves, strength
of superstructure, and rail and work to be done. By these
means the maximum useful effect of the power is secured
with the least expense for attendance, cost of fuel, and re-
pairs to Road and Engine.

With these objects in view, and as the result of twenty-
six years' practical experience in the business by our senior
partner, we manufacture five different kinds of Engines,
and several classes or sizes of each kind. Particular atten-
tion paid to the strength of the machine in the plan and
workmanship of all the details. Our long experience and
opportunities of obtaining information enables us to offer
these engines with the assurance that in efficiency, econo-
my and durability, they will compare favorably with those
of any other kind in use. We also furnish to order Wheels
Axles, Bowling or Low Moor Tire (to fit centers without bo-
ring), Composition Castings for Bearings; every description
of Copper, Sheet Iron and Boiler Work; and every article
pertaining to the repair or renewal of Locomotive En-
gines.

CONTRACTS for Rails at a fixed price, or on com-
mission, delivered at an English port, or at a por-
t of the United States, will be made by the undersigned

THEODORE DEHON,
Broadway, New York

EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



LOCOMOTIVE & RAILROAD
CAR SPRING

MANUFACTURER,

WILMINGTON, : DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky.,

Lafayette, Ind.,

Indianapolis, Ind.,

Columbus, O.,

Dayton, O.,

Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to unravel, and leaving no chain or
ridge on the underside, the economy of thread, and adap-
tability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

Send or call for a circular, containing all particu-
lars, prices, testimonials, etc.

Feb 12.

WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

-AND-

Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly
on hand, painted, and ready for shipment, with
instructions for applying them. Give us your orders at
No. 66 West Third Street, Cincinnati, Ohio.

Sst. 2.

MOSELEY & CO.

JAMES FOSTER, Jr. & CO.,
MATHEMATICAL AND PHILOSOPHIC-
AL INSTRUMENT MAKERS,

S.W. CORNER FIFTH AND RACE,

Cincinnati Ohio.

Drawing Instruments, Scales of all kinds, Barometers,
Thermometers, Spectacles, Microscopes, etc., always on
hand. Repairing attended to.

H TWITCHELL.

JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.
Pennsylvania, are prepared to execute orders for Street and
other Rails on terms favorable to parties wanting to pur-
chase Ag. 4 m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron
hammered. The whole operation from ore to finished Iron
is conducted at our own Works June 9.

THE SCHENECTADY

LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness
the best and latest improved

COAL OR WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

-AND ALSO TO-

Rebuild and Repair Locomotives.

The above works being located on the New York Central
Railroad, near the center of the State, possess superior
facilities for forwarding their work to any part of the coun-
try, without delay.

JOHN ELLIS, President.

WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boil-
er Flues—from 1 1/4 to 10 inches outside diameter, cut
to definite lengths.

Wrought Iron Welded Tubes—from 1/2 inch to
8 inches inside diameter, with screw and socket connec-
tions, for Steam, Gas, Water, or other purposes, and fit-
tings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong
and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—from 1/4 to 24 inches
diameter, and branches for same, &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS,

THOS. T. TASKER, JR.,

CHAS. WHEELER,

S. P. M. TASKER,

HY. G. MORRIS.

BUTLER'S

MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroad offices
for the South and West. For sale by 1,000 leading Station-
ers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, OCTOBER 9, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion.....	\$1 00
" " per month.....	3 00
" " six months.....	12 00
" " per annum.....	20 00
" column, single insertion.....	5 00
" " per month.....	10 00
" " six months.....	40 00
" " per annum.....	60 00
" page, single insertion.....	15 00
" " per month.....	25 00
" " six months.....	110 00
" " per annum.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	6.45 P. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.10 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	6.00 A. M.	5.40 A. M.
Bellefontaine Accommodation.....	5.20 P. M.	6.45 P. M.
Marietta & Cincinnati—		
Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.
Ohio & Mississippi—		
Mail.....	5.00 A. M.	10.05 P. M.
Seymour Accommodation.....	2.00 P. M.	1.15 P. M.
Express.....	5.00 P. M.	5.53 A. M.
Indianapolis & Cincinnati—		
Mail.....	6.00 A. M.	11.10 A. M.
Chicago Express.....	6.30 P. M.	10.00 A. M.
Dayton & Michigan—		
T. & D., Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.
Kentucky Central— (City time.)		
First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

THE PACIFIC RAILROAD.

No enterprise of internal improvement since the completion of the Erie Canal has ever attracted as much of the attention of the American People as the project of a Pacific Railroad. It has occupied more or less the thoughts of many of the leading minds of the country ever since Col. Whitney offered, single handed and alone, to build it, some twenty years ago. He could have done it, and it would have been in full operation for at least these ten years, if Congress had listened to his appeals, and the country would have had the benefit of it, with as small an outlay of capital on the part of the Government as will be necessary to complete the present enterprise. Neither was his scheme any more open to the charge of monopoly than is the present one, which will inevitably fall into the hands of a few who have the inside track. And for our part we would much rather that the Father of the enterprise should have been enormously rewarded, than that a few intriguers of Wall street should now reap the benefit of his brains and his labors. But then such has ever been the course of events in this world. "One soweth and another reapeth," is as true now as it was two thousand years ago. The *American Railroad Journal*, whose editor undoubtedly understands the temper of Wall street, as well as most men, thus expresses his fears. He says, "Perhaps the greatest apprehension is to arise from the method in which the final organization is to be effected. As the matter now stands, it seems quite evident, that the Government credit being large, but little outside subscription will be necessary. By the act of Congress, when two millions are subscribed and ten per cent. is paid in, the work may proceed, and when the first forty miles are finished, sixteen thousand dollars per mile will be advanced by the Government to the Company in its bonds. If, as is now supposed by many competent judges, the road can be made with these government advances, no more than the ten per cent. will be called in, at least not for the present. Those parties then who advance this \$200,000 will have the control, the manipulation of these bonds, the management of many millions, an enormous patronage, extensive contracts and the sale of the ceded lands. Thus an immense power will be in the hands of the representatives of a very small capital, and as our Wall street operators have a keen relish for such transactions, we should not be surprised if a combination was made for the purpose of just such a speculation. It is to be hoped that the subscription will be so large as to render the attempt impossible."

Notwithstanding, let us have the road. Man-kind is suffering from not have it, and although it is impossible to prevent the evils feared, yet the benefits to result from its completion will far outweigh them. What would have been the result in case of war with a great naval power, or if California and Oregon, instead of South Carolina and Virginia, had been the hotbed of treason and the nursery of the breed of rebels that are now endeavoring to destroy

our noble constitutional fabric, and build up a despotism worse than that of Nero. How would our troops and munitions of war been transported to the Pacific slope. Ask the cost of a Utah war, and multiply the handful sent there by the hundreds of thousands now in the field, and you may approximate a reply. It may be answered that the Pacific slope is not worth the outlay. That is a mistake. It is worth double all that the rebels ask to sway over. True, our country is great, but we have not a foot of ground to spare. It has all been bought with precious blood, and hallowed as the repository of the bones of our Fathers, brothers and nearest kin, and we can never allow traitor hands or foreign foe to snatch one single star from our galaxy of glory.

To give an idea of the value of the territory which so many affect to despise, we quote from the admirable speech of S. DeWitt Bloodgood, Esq., which we publish in to-day's issue, that "According to the government survey she possesses four hundred thousand square miles of territory, which would give eight States as large as New York, fifty as large as New Jersey, and fifty-seven as large as Massachusetts. With a population equal per square mile to that of New Jersey, California would support eighteen millions of inhabitants; if equal to New York, twenty millions; and if equal to Massachusetts, forty millions."

This is said in reference to California alone; multiply it up with Oregon, Washington, Colorado, Arizona, Utah, Dacotah, etc., all of which are classed in the far off, and scarcely valued treasures of our common country, and we will feel astonished that we have not built a dozen railroads to them years ago, rather than for a moment to hesitate as to the expediency of the completion of the present project.

In reference to our ability to build the road now, the *Journal* says, "The financial condition of the country at this moment is favorable rather than otherwise to the construction of this road. One or two millions of dollars are expended every day by the Government; it is in the hands of the people, and largely accumulating there. It will find its way into innumerable forms of investment. Thousands will be willing to place some money in the stock of the Company from patriotic and other motives, indifferent as to the immediate personal results. They know it will vastly benefit the trade and commerce of the country, populate the fertile valleys of the Platte and other great rivers, that it will add to our agricultural products, give rise to new towns, cities and states, that it will change the route of traffic with the East, deprive Europe of its advantage of position in that intercourse, and make New York the clearing house of the world, and bring forth the treasures of the Sierras in inexhaustible quantities."

The Michigan Central Road earned in September,

1861.....\$236,845 97
1862.....295,956 19

Increase.....\$59,110 22

equal to 25 per cent.

STEEP GRADES AND LOCOMOTIVES.

(Continued)

Having now noticed at considerable length, the working of freight trains on heavy grades, on American roads, we may now glance at what is being done in Great Britain and on the continent of Europe. The working of the famous Semmering and Giovi inclines, the former on the Vienna and Trieste, and the latter on the Turin and Genoa Railway, do not, if we are to judge from reports, compare favorably with the ordinary working of the Baltimore and Ohio grades. The heaviest engines now employed on any railroads anywhere are the Engerth engines, on the Chemin de Fer du Nord; and the Chemin de Fer d'Est, of France, and on the Nord line these engines are employed on grades rising only from 26.4 to 35 feet per mile. These engines weigh 41 tons (of 2,240 lb.) in running order, and have tenders so connected as to form component parts of their structure, the whole weight of engine and tender being 62 tons. The engines have outside cylinders (the gauge of the line in question being but 4 feet 8½ inches) the diameter of the cylinders being one half of one metre (19 11-16 inch,) but many have been bored out to 20 inches. The stroke is 26 inches, and the eight coupled wheels of the engine are 4 feet 1½ inches diameter. The boiler is 5 feet in diameter, and contains 235 tubes, 2 1-5 inch outside diameter, and 16 feet 5½ inches long, the external tube surface being 2,220 square feet. M. Flachet, the leading authority in France on all questions of locomotive power, if not, indeed, of railroad engineering, states that these engines draw, as an ordinary load including their own weight, 623½ tons (English,) at 10 3-8 miles an hour, on a grade of 26.4 feet per mile, 15 miles long. Taking the friction etc. at 10 lb. per ton, the resistances amount to 13,218 lb., corresponding to 360 horse power and to a mean pressure of 75½ lb. on the pistons. These engines run over a T rail, 4 inches high, weighing 74 lb. per yard, fastened without chairs, and by spikes only to sleepers 3 feet from centre to centre except at joints, where the distance is 30 inches, (the joints are "fished.") I have a letter from M. Couche, *ingenieur de la voie*, in which he speaks with much confidence as to the working of these engines over his track; and M. Chobrynski, *ingenieur de la traction*, has shown by statistics that they are the most economical, with respect to draught, of any on the line, I have ridden upon them while they were drawing 450 tons behind them, at 25 miles an hour.

On the Semmering incline, a grade of 132 feet per mile for several miles, the reported performance of the largest engines is as follows: Six coupled wheels, 3 feet 7¾ inches in diameter, 18.7 inch cylinders, 25 inch stroke, whole weight 38½ tons, or, with tender, 55½ tons. The load is 110 tons, making a total

weight of 165½ tons, at 11.4 miles per hour. The friction and other resistances, besides gravity, are estimated at 13 lb. per ton, or 11,402 lb. in all, which, overcome at 1,003 feet per minute, represents 346½ horse power, and 57 lb. on the piston.

On the Sarrebuck and Manheim road, on the continent, a considerable number of six wheel tank engines, built at Borsig's great works, in Berlin, are employed. These have 18 inch cylinders, 27 inch stroke, 4 feet wheels and weigh 43½ tons, there being no tender. I have no more than a general account of the working of these engines, but it appears that they are made to do good service.

In England, one of the longest heavy grades is that of 39 feet per mile, for 22 miles out of Manchester, on the Manchester, Sheffield and Lincolnshire Railway. Six wheel freight engines, built by Sharp, Brothers and Co., under the superintendence of Mr Beyer, now of Beyer, Peacock and Co., are employed to work this grade. The first of these engines weighed 26½ tons, but a heavier pattern, weighing 35 tons, is now employed. Both classes have 18 inch cylinders, 24 inch stroke, and six coupled 5 feet driving wheels, without trucks, the earlier pattern having 133 tubes, 2 1-8 inches diameter, and over 14 feet 3 inches long, giving 1,054 square feet of tube surface. The first of these engines would take 304 tons, in addition to their own weight, or 345 tons, up the grade. The last pattern weighs, with tender, upwards of 50 tons, and takes 352 tons besides, up the grade, at 16 miles an hour. One of the earlier pattern or 26½ ton engines, working on the East-Lancashire Railway, took, including its own weight, 179 tons, up the Accrington grade, 2 miles long, rising 1 in 41, or 128.8 feet per mile, starting from the bottom. Taking the friction at 10 lb. per ton, (although the speed was but 5.2 miles an hour) the resistances would be 11,569 lb., equal to 89 lb. per square inch mean pressure on the piston.

The Lickey incline on the Birmingham and Gloucester division of the Midland Railway is about two miles long, and rises at the rate of 1 in 37, or 142.7 feet per mile. It is worked, I understand, by six wheel engines; with 16 inch cylinders, 24 inch stroke, and 5 feet wheels, helped up with pushers, with cylinders of the same size, and having 4 feet wheels. Both engines weigh 67 tons, and the load taken is reported at 240 tons at 6½ miles an hour.

There is a short grade of 1 in 59, or 90 feet per mile, and say ½ or ¾ mile long, rising from Aberdeen, on the Great North of Scotland Railway. Two four wheeled tank engines, weighing 25 tons each and having 15 inch cylinders, 24 inch stroke, and 4½ feet drivers, are employed to take up freight trains. These engines carry 150 lb. steam, and as the run up is made in from 4 to 5 minutes, this pressure does not fall off to any con-

siderable extent. Owing to this circumstance the engines take up very heavy loads in comparison to their own weight. They will take up, as I learn, 19 wagons weighing 209 tons; or, with their own weight, 234 tons at 10 miles an hour. To do this the average pressure on the piston has been found to be 118 lb. per square inch. These engines were made by Messrs. Beyer, Peacock and Co.

On the Manchester and Oldham Railway there is a grade 1½ miles long, and rising at the rate of 1 in 27 or 96 feet per mile. I have heard reports of some very fair work by tank passenger engines on this line, but know nothing of the regular working of the freight traffic.

Going again to the Continent, the Giovi incline of 1 in 36, or 146½ feet per mile, on the Turin and Genoa line, is some 8 or 10 miles long, and was, and may be still, worked by double engines coupled together, back to back. These engines were built by Messrs. R. Stephenson and Co., Mr. Stephenson having advocated this system for steep grades. The engines have 14 inch cylinders, 22 inch stroke, and 3½ feet wheels. The pair of engines weighed 50 tons, and the attached load was 100 tons, making 150 tons in all, taken up at 15 miles an hour. The effort is equal to 222 horse power for each engine, the corresponding mean pressure on pistons being only 54 lb. per square inch.

The late Mr. Stephenson had recommended this system of working two engines coupled together, for the Great Indian Peninsula Railway, a grade ascending the "Ghants," or coast hills, near Bombay. This grade is 15½ miles long, and rises 1,831 feet, 5½ miles rising continuously at the rate of 132 feet per mile, while some portions rise at the rate of 142.7 feet, the average of the whole being, say, 116 feet. The curves are generally ¼ mile radius and upwards, except one, 1,452 in length, of 990 feet radius. Messrs. R. Stephenson had built, I believe, some tank engines with 15 inch cylinders, and 22 inch stroke, their weight being upwards of 30 tons each, with 16 or 17 tons on a single axle. I was furnished with particulars of these engines as long ago as May, 1857, and understood they were then being shipped to India; but as the Bhoire Ghaut grade is not yet open for traffic, I can not say what the engines have been doing. At any rate it has since been decided to build some heavy ten wheel tank engines in anticipation of the completion of the incline, and these engines are now being built in Manchester. They are inside cylinder engines (for 5 feet 6 inch gauge,) 20 inch cylinders, 24 inch stroke, and have six coupled drivers 52 inches in diameter, and a truck. The boiler is 4 feet 6 inches in diameter, and contains 200 tubes, 2 inches in diameter and 12 feet 6 inches long. The fire box has an inclined grate, 7 feet long. The tank is on top of the boiler, and will hold 1,000

English or 1,200 United States gallons. It is said that these engines will weigh 48 tons in running order, and they are expected to take up themselves and 200 tons behind them, at 12 miles an hour. The gravity of this weight on the steepest grade will be 15,024 lb., and on the 132 feet grade, 13,888 lb., the friction even if taken as low as 10 lb. will be 2,480 lb., making 17,504 lb. total resistance on the 146.7 feet grade, and 16,368 lb. on the grade, re-132 ft. requiring in one case of mean pressure of 94.8 lb., and in the other 88½ lb. per square inch on the pistons. I hardly think the engines will keep up this pressure on the pistons at 12 miles an hour, although the boiler is certainly large. The average horse power to be exerted would be 470, requiring the evaporation of not less than 1,900 imperial gallons per hour, or about 2,550 gallons for the 80 minutes occupied in going 16 miles, so that the 1,000 gallon tank would have to be filled twice on the way.

From the consideration of all the facts given in this letter, as well as other data, I am disposed to recommend the adoption of outside cylinder engines having 20 inch cylinders, 24 inch stroke, six coupled driving wheels, 4 feet 6 inches in diameter, and a truck. A separate tender, on eight wheels, to be provided, to carry not less than 1,600 imperial or 2,000 New York gallons. [The New York gallon = 8 lb. distilled water; the United States gallon, 8½ lb.; the imperial gallon, 10 lb.] The boiler to be 4 feet 3 inches in diameter, and to contain 200 tubes, 2 inches in diameter and 13 feet long. The fire box, say 5 feet 2 inches long, and 3 feet 5 inches wide on the grate. The wheel base to be 23 feet, or, from centre of back drivers to centre of truck, 20 feet 3 inches. Engines of this length will track your 739 feet curves without the least difficulty, as I know from the working of engines of at least equal length on 799 feet curves on the 6 feet gauge of the New York and Erie road, and 637 feet curves on the narrow gauge of the Pennsylvania Central Railroad. The engine would weigh, probably, 36 tons, of which 27 would be on the drivers. If you intend, as I believe you do, to haul trains of a maximum weight of 300 tons, exclusive of engine and tender, from the Parabyba river to Belem, and of 220 tons in the opposite direction, this is the lightest engine you could depend upon for the work. Under ordinary circumstances the regular load of such an engine, and exclusive of itself and tender, should be 225 tons from the river, and 175 tons from Belem,—say 15 8 wheel cars, which would be fully loaded one way, and from one half to two thirds loaded (as, in the absence of any information, I presume they would be) the other. Were you intending to run such trains at eight miles an hour, one of Baldwin's 10 wheelers, such as those employed on the Pennsylvania Central, Cleveland and Pitts-

burgh, Louisville and Nashville, and other roads, would be, perhaps, as good an engine as you could have, and I should deem it presumption on my part to say that I could plan one much better. But the 19 inch cylinder, 22 inch stroke, 50 inch wheel and moderate sized boiler, is hardly the engine for heavy freight, on 68 to 96 feet grades, at 12 miles an hour. The engine I propose is intended to haul about the same train as Baldwin's, but at a higher speed, the same boiler pressure being maintained in both.

Even on roads having moderate grades, the 20 inch cylinder engines are, I believe, the most economical of any, provided there is business enough to work them up to their proper power. Mr. Hayes, for many years Master of Machinery on the Baltimore and Ohio road, and now holding a like post on the Illinois Central, has proved this; on the Delaware and Lackawanna it has been admitted that the 18 inch cylinder engines, built on my plans and under my superintendence, should have had 20 inch cylinders; M. Chobrzynski, of the Chemin de Fer du Nord (France,) declares that his 20 inch Engerth's are the most profitable engines on the road, and M. Couche, Engineer of Road, writes me very favorably of them; and 20 inch cylinders are now being adopted, in opposition to Mr. Stephenson's views, for the Great Indian Peninsula Railway.

The tendency, as you are aware, is towards heavier and heavier engines, and those which may be now reckoned large, may be thought to be rather undersized in 1870, when certainly, your engine should be as good as new. It is to be borne in mind, too, that on many roads where very large engines have not yet been adopted, heavier pressures than you would care to keep up are allowed. Thus, the New York and Erie road is worked by engines carrying from 130 lb. to 140 lb. steam, and I have thought it prudent to leave the foot plates of some of them when I saw the gauge marked 165 lb. On the New York Central Road, the grade engines running out of Albany carry 145 lb. regularly. On the Manchester, Sheffield and Lincolnshire, and other lines here, 130 lb. is the regular pressure, and, in engines on the Great North of Scotland, line 150 lb. is kept up in daily work. Of course, the margin of safety should be so wide that, practically, a boiler which is not safe at 150 lb., is not safe at 100 lb.; but nevertheless, the last named may be the more economical pressure of the two. For your heavy engines, I would recommend that the safety valves be set to blow off at 100 lb. The boilers will be made strong enough to stand as much more as you like to put on, and so, if you find it desirable to work your steam still stronger, a few turns of the nuts on the spring balance stems, and a little more energy on the part of the fireman, will meet your wishes in this respect.

There is a natural dislike, on most roads, to making up too long trains, on account of the risk of pulling the cars to pieces. In the present case, however, the 20 inch cylinder, 24 inch stroke, and 4 feet 6 inches wheel, will not at any given mean pressure on the pistons, exert as much tractive force, or, in other words, strain the cars next the engine, so much as Winans' ordinary pattern of burden engine; not nearly so much as Mr. Hayes' 20 inch cylinder, nor as much as the Engerth engines on the French roads, and but a few pounds more than Baldwin's 10 wheel engine. If we take a mean effective pressure of 76 lb. per square inch upon the pistons, throughout the stroke, we shall have for the various engines named, the following tractive powers:

Class of engine	Diam. of cyl.	Length of stroke.	Diam. of drivers.	Tractive force at 75 lb. on pistons.	
				in. in.	lbs.
Don Pedro freight eng. as proposed	20	24	54		13,333
Ross Winans Delaware and Lackawanna R.	22	22	43		18,572
Ross Winans' Bal. & O. & Reading	19	22	43		13,852
S. J. Hayes, ditto	20	22	43		15,349
Baldwin's 10 wheel P. C. R.	19	22	48½		12,281
Zerah Colburn, Del. L'k-awanna & West R.	18	24	48		12,150
N. Y. & E. stand'd ft. en.	18	20	60		8,100
Do., No. 210 exp'm'tal en.	17	24	60		8,670
Hinkley & Drury's 10 wh. engine	16	20	46		8,348
Eng. ft. en. heavy pat'n.	18	24	60		9,720
Gr. Ind. Peninsula engines	20	24	52		13,846
Eng'th engines N. Railway of France	19	11-16	26	50	15,113
Eng'th en. Vienna & Trieste Railway	18.7	25	40½		15,000
Borsig's tank en. Sarrebrück & Mannheim R.	18	27	48		13,668

I do not recommend tank engines for your grades. Unless the tank holds so little water that the engines are stopping every twenty minutes or half an hour to take in more, the extra weight carried—on an engine already heavy enough—will tell on your track. The engine I propose would not have over 4½ tons on any one wheel. Many large tank engines, built in England and on the Continent, have 6, 7, and even 8 tons on a wheel. The great Engerth engines, however, having separate tenders have no more than 5½ tons on any single wheel.

In this lengthy communication I shall not trouble you with details of the mechanical construction of the engines I propose, further than to say that I have ventured upon nothing new. My connection with locomotive building commenced fifteen years ago, and in all this time I have been seeking, both as a designer and constructing engineer, to prove all things and to hold fast to that which is good. I have not only seen a vast variety of patterns of locomotives, but have had a tolerably wide field of observation for ascertaining their economical qualities. I have tried to divest myself of everything like prejudice, especially national prejudices; but I cannot lose sight of the fact that engines built on the American plan are the cheapest in first cost, and it is a mere matter of the comparison of statistics of working to prove that more work is got out of them for less money than from any other engine

made anywhere. I will close this letter by remarking that I have spent very much more time in determining the mechanical arrangement and the proportions and construction of the parts of your engines in detail than I have given to the general considerations which form the subject of this communication. No theoretical deductions of any kind—at least with respect to rolling stock—can supply the place of that careful consideration of details by which, I think more than by any thing else, success is attained by the locomotive engineer and builder.

Very truly yours,

ZERAH COLBURN.

P. S.—Mr. Sinclair, Locomotive Superintendent of the Eastern Counties Railway, has just been kind enough to give me particulars of the working of his goods engines on a grade at Brentwood, a few miles from London. The grade is 3 miles long, and rises for 2 miles at the rate of 1 in 100, then for $\frac{1}{2}$ mile at the rate of 1 in 114, and finally for $\frac{1}{4}$ mile at 1 in 90. His outside cylinder goods engines have 17 inch cylinders, 24 inch stroke, four coupled 6 feet (72 inches) wheels, and a pair of leading wheels, and weigh 30 $\frac{1}{2}$ tons with 20 $\frac{1}{2}$ tons on the drivers. The tender weighs 23 tons. The engines have 72.3 square feet of fire box surface, and 968 $\frac{1}{2}$ square ft. of tube surface. They draw regularly 35 wagons, weighing 297 $\frac{1}{2}$ tons, or, with engine and tender, 350 $\frac{1}{2}$ tons, up the grade of 1 in 90, = 58 $\frac{1}{2}$ feet per mile. The gravity is 8,723 $\frac{1}{2}$ lb., and friction, at even no more than 8 lb. per ton, 2,804 lb., or a total resistance of 11,527 $\frac{1}{2}$ lb., requiring 119 $\frac{1}{2}$ lb. on pistons. If friction be taken at 10 lb. per ton, it would require 127 lb. on pistons. Mr. Sinclair states that the engines can take up 40 wagons or 340 tons, making with engine and tender, 393 tons. This, with friction at only 8 lb., would involve a resistance of 12,925 lb., equal to 28 per cent. of the weight on drivers, and requiring 134 $\frac{1}{2}$ lb. on pistons, and, certainly, 140 lb. if not 150 lb. in the boiler. The effort, however, would be but for five minutes, and the whole performance appears to be altogether extraordinary.

Z. C.

The Fort Wayne and Chicago Road, under the reorganization has become one of the most important lines of road in the country, and is firmly established on a paying basis for all its securities, including its common stock. In view of its large earnings the bonds of this road are selling lower than other securities of the same class. Thus the net earnings of the current year are twice enough to pay the interest on the First and Second Mortgages, yet the latter are selling at only about 95. The annexed figures show that this road is not only earning the interest on its entire debt, but a large dividend on its stock.

PACIFIC RAILROAD.

CONVENTION OF CORPORATORS.

Speech of S. DeWitt Bloodgood, Esq., of New York.

We understand that an official report of the proceedings of this Convention recently held at Chicago will soon be published. Meantime we are indebted to Mr. S. DeWitt Bloodgood for a copy of his very able speech on the second day of the Session, in regard to the publication of which the following debate occurred. It was delivered in support of the admirable resolutions reported to the Convention by S. B. RUGGLES, Esq., Chairman of the Committee entrusted with their preparation:

L. A. THOMAS, of Iowa, moved that the speech of S. DeWitt Bloodgood be published in pamphlet form. It contains in it a great amount of information, which many people west of the Mississippi would be very desirous of having. The information, of a statistical nature, contained in that speech, is extraordinary.

MR. CASS—I rise with great reluctance, because the subject under discussion appears to be of a personal nature. I am willing to admit that I scarcely ever heard a document so scholarly, so elaborately, and so skillfully compiled. I listened to every word with the profoundest attention. But, whilst I admire it, I would be very unwilling to give my sanction to all the positions advanced in it. If there be any way of publishing that speech without committing the Convention to some of the points contained in it—if we can get the information contained in it without committing ourselves to its details—I shall be very glad to sanction it.

MR. THOMAS—In reference to that matter, I may say there are in it some suggestions which I should wish to examine very carefully before I give my full assent to them. Mr. Bloodgood, I believe, intends revising it himself, and it is for the purpose of getting this information, which I believe to be so valuable, into the hands of the people at large that I make my proposition.

MR. BLOODGOOD—What I said before this Convention yesterday was the result of some reflection. I did not expect that the opinions to which I gave utterance would be fully indorsed by every man, for each one of us has his own opinions, and they must go for what they are worth.

The President inquired whether the gentleman who made the motion wished the speech to be published at the expense of the Convention, and reminded him that no finance committee had as yet been appointed.

MR. THOMAS then replied that this was not his intention.

MR. JOHN CORBY, of Missouri—It appears to me that it would be better to appoint a committee to co-operate with Mr. Bloodgood in revising his speech, and preparing it for publication for the benefit of the Convention.

[Further remarks were made by members of the Convention to the same effect; but we omit them, the above being sufficient to show the manner in which the speech was received, and the importance of its early publication. We are sure our subscribers will congratulate us on being able to give them this able and scholarly document in advance of its appearance elsewhere.—Editors.]

MR. PRESIDENT AND GENTLEMEN.—Our national character was never better illustrated than on the present occasion. In the midst of a causeless and desperate rebellion against the happiest form of government which humanity was ever inspired to establish, while in the midst of an enormous expenditure of treasure, and the effusion of our most precious blood to

preserve this Union, undeterred and undismayed we assemble here to-day under the authority of the National Legislature to organize an enterprise of the vastest proportions and with the most momentous results. A railway across a continent, a connection between the two great oceans of the globe, and a change in the traffic of Europe, Asia, and America—these are the objects which present themselves for our consideration. After years of discussion, numerous surveys, and a general conviction that the proposed work is within our power and our resources, we have been selected to give form and tone and character to the project, and we here thoughtfully, I trust, assume a responsibility which is not for a day, but all time. It is with this feeling I approach the subject, happy to be among the number of those to whom so great and honorable a trust is confided by the people of the United States. This is a meeting of corporators for the time being, intrusted with important duties, so important that on our present action the success of the enterprise may essentially depend.

The shape we give it will likely to be preserved. If we appeal in the right way to the intelligence and patriotism of the people, we may hope for their support and an adoption of our recommendations; but on the other hand, if any other than a comprehensive and liberal spirit prevail, if local interests and personal wishes are to have a preference, we may expect to see an early application for the repeal of the act of Congress, an intention to which utterance has already been given, even in my hearing.

What, then, is our plan? How shall it best be put forth to the public? How can we assure capitalists of its remunerative character?—how convince the people, who have loaned us the national credit, that their confidence is not misplaced, and that their favor is not bestowed on an unworthy and ill-considered scheme? And how shall we accomplish what we now inaugurate, in the shortest time, in the most substantial manner, and at the least expense? All this we shall have to point out, if we expect to obtain, outside of the government, any large financial support. It is for us to show this in the first place, for, if the necessary subscriptions are not obtained, sufficient to commence and proceed with the work, the generous aid of the national credit will not be fully available. In this, as in almost all other great efforts, it is the first step which costs.

The letter of our duty is plain enough. It is set forth clearly in the act of incorporation. The first question is, where shall we open books of subscription, with how much notice, and to whom shall this duty be entrusted? Shall these books be opened without preliminary maps, tables, explanations, and arguments, or shall these be carefully prepared and given adequate circulation at the start? Shall the number of Directors hereafter to be chosen be thirteen in number, or be enlarged? Shall a railway of almost two thousand miles extent be left to the management of a few or many persons? May they be taken from one State, or distributed equitably among all the States furnishing the capital, or in proportion to the subscriptions? These questions considered in time, and decided in time, will have an important bearing on the immediate success of the project.—immediate I say, for even if we should falter in our present movements, the Pacific Railroad will survive all errors, all mistakes; it is a work certainly and finally to be accomplished.

From the words of the act, I have inferred that the details of the work will fall into the hands of the direction the moment it is duly elected, and that, therefore, we, as the original corporators, need not embarrass ourselves with ulterior matters of engineering or finance. We are not even to put the first spade in the

ground, but must see that the money is ready for the laborers when the first turf is raised.

When this project was first entertained, after the conquest and acquisition of California, it was looked upon by many reflecting people as one not only visionary, but not within the range of possibility. The poetry of the idea is, however, found reducible to prosaic fact. We have no longer before us a castle in the air to dream about, but a real, substantial, actual edifice to construct.

This Pacific Railroad is an absolute, exacting necessity. We have a sister State on the shores of a great ocean, which we early sought to reach, to which the star Empire was leading us, and at which we now have actually arrived, unequalled for its mineral wealth, its admirable climate, and its exhaustless fertility, an empire in itself, an ally, a friend in need, the most civilized and prosperous country on the whole Pacific Ocean, not a colony of tawny natives, mixed up with European masters, held by force, and robbed by them at pleasure, but a republican State, recognising the laws of Christianity and civilization, already mature and prosperous. Sprung originally, like another Minerva, from the brain of the American Jove, California could, after a few years, build this road alone. According to the government survey she possesses four hundred thousand square miles of territory, which would give eight States as large as New York, fifty as large as New Jersey, and fifty-seven as large as Massachusetts. With a population equal per square mile to that of New Jersey, California would support eighteen millions of inhabitants; if equal to New York, twenty millions; and if equal to Massachusetts, forty millions.

That she will be a staunch supporter of the work is very certain. Her representatives in Congress in fact secured the passage of the act. Her sons are here with us to-day to see if we comprehend the vastness of the enterprise. To leave such an ally and friend to the hazardous connection of long and dangerous voyages, to the border intrusion of two large foreign dependencies, Russian and British America, would be but a poor return for their loyalty to the Union, and a poor exchange for the valuable products she now sends to us through her golden gates, and which enable us to meet the unfriendly drain of the foreign bankers, not only with the impunity but in difference. In the spirit of enlightened selfishness, then, if in no other, we must perceive, that the construction of this railroad is an absolute necessity and an unexampled advantage to ourselves. We have not only a large and profitable trade with California, but with countries far beyond, which has been conducted, through the spiritedly, perseveringly, and profitably for many years, yet at an unnecessary cost. The road to India, to China, to Japan has been a long and circuitous one; we have had to pay toll to the turnpike keepers, the bankers of Liverpool and London, when we wished to pass to the East for teas, our silks or our drugs. Freights, insurances, commissions, and premiums on bills of exchange have piled up their charges upon our imports, on something of the principle of KEPLER'S famous law, increasing "as the square of the distance."

Let us have this road and our invoices will be shorn of most of these items, so formidable in any European account rendered, as many of us no doubt have happened to know. All we save in these will be a reduction in price to the consumer here at home. The day is near at hand, I trust, that when we drink our cup of tea, we shall do so without having lost a single drop to any inimical banker.

The extent and importance of our East India trade have been growing familiar to the American comprehension. But before we examine into this, let us see what we are to gain

by it for ourselves. In Congress, and while the Pacific bill was under consideration, Mr. McDUGALL, the Senator, and Mr. PHELPS, a Member of Congress from California, most ably presented this subject before it, being comprehensive and masterly in their arguments in favor of its passage. Mr. McDUGALL stated the fact, that the United States Government paid yearly for transportation to California, to be saved by the use of this road, no less a sum annually than \$7,357,000. This was no guess work; it was taken from the Report of the Chairman of the House Committee. It is about 100 per cent more than the interest guaranteed by the government on the completion of the road. This difference, with the five per cent. reserved to the government by the bill, will pay the whole principal and interest of the bonds years before they mature.—[See *Evening Post*, July 6th, on Mr. McDUGALL'S speech.]

But let us see for a moment, and realize if possible, the results of Mr. McDUGALL'S calculations, which, I learn from him, were the result of months of careful consideration, and which are below rather than above the mark.

From his speech in the United States Senate on the bill, we make the following extracts:

STARTLING CALCULATIONS AS TO THE PACIFIC RAILROAD.

The present cost and loss of the transportation of men and merchandise between Boston, New York, Philadelphia, and Baltimore on the one side, and San Francisco on the other, from the best compiled statistics, may be stated thus:

Passenger transits both ways, including overland transits, 100,000, averaging \$150 per capita.....	\$15,000,000
Time of passenger transits, average forty days, and continuing them as dead labor while in transit and otherwise, their average labor worth two dollars per diem.....	8,000,000
Freights both ways around the Horn, 215,000 tons, at an average of twenty dollars per ton.....	4,300,000
Value of freights both ways, other than gold and silver, \$110.00-0.00. On this, by the reason of twice passing through the tropics, there is, from leakage, sweating, and other causes, a loss of not less than seven per cent. not covered by insurance.....	7,700,000
Insurance, of gross losses uninsured; that is, where parties are their own insurers, three per cent.....	3,300,000
Interest on the capital which may be considered dead while 135 days in transit—say four per cent.....	4,400,000
Government transportation assisted.....	7,357,000
Isthmus transportation (excluding passengers) and insurance on the same.....	3,250,000
Freights to Nevada Territory, employing 2,000 teams 200 days each year, at a cost of twenty-five dollars per team.....	10,000,000
Passenger transits to and from Nevada.....	2,500,000
Passengers and freights to and from Denver and Salt Lake, estimated without data at.....	10,000,000
	\$75,807,000

The cost of the same business and service by a continuous line of railroad from San Francisco to the point of delivery east, and the reverse, may be stated thus:

Two hundred and fifteen thousand tons at \$30.....	\$6,450,000
Interest on \$10,000,000 for ten days, one-third per cent.....	335,666
One hundred thousand passenger transits at \$50 each.....	5,000,000
Ten days each passenger in transit, loss \$2 per diem.....	2,000,000
One hundred tons gold and silver, \$300 per ton.....	30,000
Isthmus merchandise.....	1,250,000
Nevada, Utah, and Colorado passengers and freights, estimated.....	2,500,000
Dime and insurance.....	1,500,000
Government freights and transportation, computed as equal to interest.....	3,773,600
	\$22,970,466

But there is another important view of this subject. Mr. PHELPS, the Member of Congress from California, in his speech on the same subject, exhibits a statement equally astounding as to the condition of our East India trade, and the losses it is subjected to on its present basis. He remarks:

"Our imports from China in the year 1857 amounted to \$8,356,982, and our domestic exports to China, \$3,019,000, leaving a balance against us of \$5,337,982. In 1858 our imports were \$10,570,536, and our exports \$2,467,645, leaving a balance against us of \$8,102,891. In 1860 our imports from the same source were \$13,566,641, and our exports \$7,170,784, leaving a balance against us of \$6,395,857. These figures exclude the exports of gold and silver. It will be observed that our trade with this nation is rapidly increasing, our imports having risen from 1857 to 1860 about sixty per cent. * * * * *

"It is reasonable to suppose that under any circumstances the balance of the trade will not at any time be less than in 1860; say, \$6,400,000. This amount of indebtedness is mostly paid through English houses, at a cost to us of about twenty per cent. At this rate, continues Mr. PHELPS, the cost of remittance is \$1,280,000 annually, and becomes a part of the price to the American consumers of tea.

"If we can, by the construction of this road, turn this treasure shipment to new channels, and it can be made from San Francisco in twenty-three days, saving from the present specie route at least sixty days in time, reducing the cost of shipment, including exchange, freight, interest, and insurance, to not exceeding four per cent., it would cause a net annual saving to our people of \$984,000. To the sum thus saved should be added the cost of the same amount of treasure shipped from San Francisco to New York, which can not be done at less rates than three and one-half per cent., and would amount to \$259,000.

"I may very properly add, that the entire balance of trade against us on what is known in mercantile parlance as the East India trade, will not fall short of \$18,000,000 per annum. On this sum the saving in exchange would amount to \$3,600,000. But these are but a small portion of the benefits this country would derive from the diverting of the specie route of the world into American channels of trade."

Fifty millions of treasure, which annually find their way to the East by the old commercial routes, would necessarily change their direction and come westward over this road. Nor was Mr. PHELPS out of the way when he said this. Its construction is even now as much dreaded by our foreign enemies, as the restoration of the Union itself. Not long since I cut from a leading London Journal a paragraph founded upon this very supposition, though first suggested by speculations in a California print. It reads thus, and is so pertinent that I may be excused for asking attention to its details:

"The California papers state that an enormous sum of money would be saved by English, French, and American merchants in premiums on gold if a steam communication existed between San Francisco and China. California sends to the Eastern States of America, England, and France, eight millions sterling of gold yearly to pay for goods which it wants. San Francisco is twenty-five days from China; the Eastern States of America are seventy days, and England and France are sixty days from China. A New York house, we will be imports every year £100,000 worth of goods from China, and exports goods to the same amount to California. That State pays three per cent. on the £100,000 worth of gold sent to the New York house, and the latter pays six per cent. to send it to China. Now if steam packet communication existed between San Francisco and China, there would be no necessity to incur the expense of thus sending specie three parts round the globe. California could pay to China the £100,000 owed by the New York house, and thus California, China, and New York would be quits. A telegram from New York to San Francisco could manage the

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	R. to of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	48		\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.	64	380	13,111,800	10,781,833	566,07	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do										"	2,500,000	6	95	1885	
do do										"	700,000	6	84	1880	
do do										"	1,128,500	6	90	1875	
do Washington Branch.....	Md.	30		1,650,000						"	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	139,129	314,000	8,795	Dec. 1860.	1st Mortgage.....	791,000	7	55	1866	
do do										2d "	160,000			1870	
Buffalo and State Line.....	N.Y. & Pa.	122½	68	1,950,950	1,049,000	27,515	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,889	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	132½	96	3,798,400	8,840,000		1,997,065	733,950	Dec. 31, 1860	1st Mortgage.....	377,000	6	100	1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7	62½	1861	
do do										1st "	800,000	7	80	1864	
do do										2d "	800,000	7	64	1865	
do do										3d " S. F.	950,000	7		1865	
do do										4th " S. F.	1,365,500	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d "	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7			
do do										2d "	1,535,000	7			
do do										3d "	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d "	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.....	1,250,000	7	80	Feb. & Aug. 1	
do do										2d "	3,600,000	7	52	Feb. & Aug. 1	
do do										2d "	2,000,000	6	26	May 1.	
Chicago and Rock Island.....	Ills.	68½	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	105	1870	
Chicago, Burlington and Quincy.....	"	86	138	4,689,340	4,814,315		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	110	1863	
do do										" 2d " S. F.	813,000	8	108	1890	
do do										1st Mor. Chi. & Aur.	399,000	7		1867	
do do										2d "	303,000	7		1869	
do do										1st "Cent. Mil. Tract	392,000	7		1864	
do do										2d "	215,000	8		1868	
Chicago, Iowa and Nebraska.....		82		No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	99	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	950,000	7	100	1880	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
do do										Income.....	305,500				
Cleveland and Mahoning	Ohio.	68½		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d "	469,000	7			
do do										3d "	344,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	25½	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7	96½	1873	
do do										3d 2d Ex.	1,165,000	7	81	1865	
do do										4th 3d Ex.	1,154,000	7	64		
Cleveland and Toledo.....	Ohio.	53½	148	3,343,800	3,850,670	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jan. 1st Div.	359,000	7	96	1867	
do do										1st " " 2d Div.	293,000	7		1872	
do do										2d " " "	265,000	7		1862	
do do										1st " Tol. Nor. & Cleve	521,000	7		1863	
do do										2d " "	293,300	7		1863	
do do										Junction Income..	44,500	7		1862	
do do										C. & T. Income..	300,000	7		1864	
Cleveland, Columbus and Cincinnati.	Ohio.	121	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	125	98½	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 13, 1860	1st Mortgage.....	564,000	7	99	1861	
do do										2d "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	105½	54½	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700	92		1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666						2d "	2,212,000	8			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	50		
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000	7	90	1875	
do do										2d "	1,000,900	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	Ohio.	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		986,061	1,219,100	249,863	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d "	180,000				
Galena and Chicago Union.....	Ills.	73½	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000		104	1862 & 1863	
do do										2d "	1,524,000		100	May 1, 1875	
Great Western	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago..	Wis.	84		400,000	No report										
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573		Land Mortgage...	5,000,000		26		
Hannibal and St. Joseph.....	Mo.	206		1,041,066	10,554,000	220,336	996,907	512,933	Sept. 1, 1860.	Mortgage Conv....	1,334,000		45		
do do										1st Mortgage.....	927,000	6	30	1873	
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	4,000,000	7	110	1869 & 1870	
Hudson River.....	N. Y.	51½	144	3,758,466	9,107,000	182,108	2,047,145	778,121	Sept. 30, 1860	2d S. F.	2,000,000	7	106½	1870	
do do										3d "	1,840,000	7	104	1875	
Illinois Central.....	Ills.	63	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000	7	100	1868	
do do										Construction.....	12,885,000	7	100	1875	
do do										"	4,115,000	6	97	1875	
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,900	Jan. 1, 1860.	Debentures.....	42,740	7	96		
do do										1st Mortgage.....	600,000	7			
do do										2d "	578,000	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		Income.....	38,700	10			
do do										1st Mortgage.....	500,000	7		1866	
do do										2d "	400,000	7	85		
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort...	200,000	7	85		
do do										1st Mortgage.....	649,984	7			
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d "	314,000				
Iron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	
Iron Mountain.....	Mo.		86½	\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,018	Dec. 1, 1860.	State Bonds.....	3,501,000				
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,906	122,797	Dec. 31, 1860.	1st	29,000	7	75	1861	
do										2d	392,000	7	70	1873	
Kentucky Central (Oovington and Lexington).....	Ky.		99	Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st "	260,000	7			
do										2d " Conv.	1,000,000	7			
do										3d "	600,000	7			
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiver.						1st Mortgage E. D.	903,000		89		
do										2d " E. D.	1,000,000				
do										1st Land Grant W D	4,000,000		21		
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report		June 30, 1861	1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.		29	514,433	130,000		107,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883	
Little Miami.....	Ohio.		61				1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000				
Louisville and Frankfort.....	Ky.		65	1,169,59	384,519		245,910	98,679	June 30, 1861	1st Mortgage.....	248,000				
do										1st Mortgage.....	2,000,000	7			
Louisville and Nashville.....	Ky.		268	5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.		288	2,800,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.		87	1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.		209	8,561,213	190,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868	
do										2d "	2,000,000	7			
do										3d "	1,500,000	7			
do										Sterling Income.....	333,000	4			
Michigan Central.....	Mich.		68½	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	Domestic "	928,617				
do										1st Mortg. Sterling	467,483	6	98½	1872	
do										1st " Conv.	500,000	8	84	1869	
do										1st " unconv.	250,000	8	96	1860	
do										1st " Dollar Conv.	2,598,000	8	106	1869	
do										1st " S. F. Conv.	4,153,000	8	108	1882	
Michigan South'n & North'n Indiana	Mich. &		31½	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. So.	991,000	9	99	1860	
do										" Nor. Ind.	985,000	103		1861	
do										" Goshen Line.	1,168,400	100		1868	
do										S. F. Toledo	2,850,000	101		1885	
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182		2d Mortgage	2,465,000	8	89	1877	
do										1st Mortgage.....	400,000				
Milwaukee and Horicon.....	Wis.		42	1,101,200						2d "	200,000	8			
do										1st Mortgage.....	420,000	8			
Milwaukee and Prairie du Chien.....	Wis.		34	192	4,944,000	2,556,000	583,186	439,943	Dec. 31, 1860.	2d "	600,000	8			
Milwaukee and Western.....	Wis.		71	No report						1st Mortgage.....	2,556,000	7		1891	
Mississippi and Missouri.....	Iowa,		35	No report											
do										1st Mortgage Conv.	1,000,000	7	90		
do										2d " S. F.	400,000	8			
New Jersey.....	N. J.		34	4,397,808	688,000		992,767	579,981	Dec. 31, 1861.	Oskaloosa Div.	1,425,000	7			
New Jersey Central.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	Land Grant.....	7,000,000	7	102½		
New York and Erie Pref.....	N. Y.		68½	Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860	Mortgage.....	711,000				
do			38½							1st Mortgage.....	3,000,000				
do										2d "	4,000,000				
do										3d "	6,000,000				
do										4th "	4,900,000				
do										5th "	1,792,500				
New York and Harlem Pref	Conn.		40½	138	5,717,190	6,055,752	.....	1,142,851	433,716	1st Mortgage.....	2,950,000	7	105½	1873	
do common			16							2d "	1,000,000	7	101	1864	
New York and New Haven.....	Conn.				3,000,000	1,990,000	108,038	925,075	325,573	Mortgage.....	912,000	7	94	Dec. 1, 1866	
do											978,000	6		Oct. 1, 1875	
New York Central.....	N. Y.		93½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Cons. Cert. to St. H.	7,925,000	6	101	May 1, 1883	
do										Mortgage.....	3,000,000	7	103	June 15, 1884	
Northern Central.....	Md.		138	2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,006,500	6			
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6			
Ohio and Mississippi, Eastern Div....	Ohio & Ind		192	Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500				
do										2d "	316,995				
do										Construction.....	4,637,920				
do										Income.....	3,591,185				
Ohio and Mississippi, Western Div....	Ills.		148	.....	3,292,403		No report			State Loan.....	7,000,000				
Pacific.....	Mo.			3,199,662	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	" S. W.	2,800,000	6			
do										Construction.....	7,500,000	6	104½	1888	
Pennsylvania.....	Pa.		359	13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,905,000	6	98½	1875	
do										2d "	2,319,000	6			
do										2d " Sterling.	1,957,440	6		1875	
do										State Works.....	7,200,000	5	89		
Peru and Indianapolis.....	Ind.		74	1,100,090	820,000	80,000	No report			1st Mortgage	2,300,000	6	99½	1884	
Philadelphia, Wil. and Baltimore.....	Del.		98	5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863	
do										1st Mort. O. & P.	1,000,000	7	96	1865	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	2d "	750,000	7	83	1866	
do										1st " O. & I.	1,000,000	7		1872	
do										2d "	380,000	7		1873	
Pittsburgh and Connellsville.....	Pa.		49	1,755,886	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000				
Racine and Mississippi.....	Wis.		104	2,705,720	1,417,000	1,065,328	220,850	68,438	May 10, 1861.						
Sandusky, Dayton and Cincinnati..	Ohio.		170	2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856	
do										"	997,000	7		1866	
do										"	1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.		125	848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886	
do and Hoeking Valley.....	Ohio.		56	405,975	500,000										
Springfield, Mt. Vernon & Pittsburgh..	Ohio.		50	1,000,000	1,050,000	200,000				1st Mortgage.....	500,000				
do										2d "	450,000				
Staubenville and Indiana..	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d "	900,000	7		1865	
Terre Haute, Alton and St. Louis....	Ills.		208	No report						1st Mortgage Conv.	1,000,000	7	110	1862	
do										2d " Conv.	2,000,000	7	92	1868 & 1871	
do										1st " Bel. & Ill.	517,000	7		1873	
Terre Haute and Richmond.....	Ind.		100	73	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	92	1868
Toledo, Wabash and Western.....	Ohio & Ind		243	2,123,506	5,096,049	52,380	233,545			1st Mortgage.....	3,400,000	7	92	Aug. 1, 1868	
do										2d "	2,500,000	7	70	Nov. 1, 1876	
do										Mort. Coupons.....	96,449	7		1860 to 1865	

business. In the same manner, California could pay to China what it owes to France and England. In ten days, by means of the Continental American Telegraph, A, in London or Paris, could send to B in San Francisco, to forward to C in Hong Kong, the amount owing from B to A, which A owes to C. About seven per cent. out of nine would thus be saved. Now, seven per cent. on £8,000,000 is nearly £600,000."

Thus, we see the truth is beginning to be perceived abroad, and the article foreshadows the conclusion. I make but a single objection to its corollary—I say it with all possible good humor and courtesy—San Francisco will not be the clearing-house, it will be New York. Threadneedle Street, the barometer of the financial world, will find its fluctuations registered there, and Wall Street will be the vernier of the scale.

But in order to do justice to these considerations, another subject material in interest presents itself. The railway, while in itself a project worthy of our utmost exertions to complete it, will necessarily involve another, and this is an ocean of mail steam service on the Pacific. I believe that Congress at its last session had a bill before it granting a subvention to a California company of \$500,000 for that purpose. It was not passed; if it had, I should rejoice; I only wish the same assistance had been extended to the Atlantic companies. But I had the opinion then, as I have it now, that this service may be maintained in a simpler and more efficient way. It is well known, that within the last two years a large number of wooden as well as iron steam sloops have been added to our navy. Some of them are very swift vessels; but when this war is over what is to be done with them. Iron armor has superseded wooden walls. The latter must be abandoned in all future naval wars. Our wooden ships of the class I have mentioned, most of them new and costly, will be laid up in our navy yards, laid up "in cold obstruction and to rot;" in all probability a dead loss to the country! All then the government has to do, is to place these supernumerary vessels on the ocean as government mail packets, to reduce their armaments and crews to a peace standard, and establish regular lines on the principal routes between our chief Atlantic and Pacific ports, and those of the foreign countries with which we trade. They will perform double duty of protecting our commerce, and becoming its active auxiliaries. This will be far cheaper than to grant subventions and monopolies to private companies, and avoid all the unpopularity of such measures. We should not wait a moment to do this, as soon as this war is over. All our ocean mail service is now performed in foreign ships. We have not a regular mail steamer afloat. There is only occasional private steamer to Havana. If a New York merchant wishes to write to his agent in Liverpool, or Havre, or Bremen, or Rio Janeiro, or Monte Video, or Vera Cruz, or Para, or Hong Kong, or Hakodada, his letter must go forward in an English mail bag. Take ten or twenty of our fastest steam sloops and place them on those routes, and our commerce will immediately revive. We shall be able to compete with all and every of the nations of the old world, in the markets where they thrive, and from which they receive their regular correspondence.

How much might be said in favor of the propriety of this measure, of the necessity of regular commercial correspondence, of the advantage of employing as many of our gallant naval officers as possible after the war is closed, of keeping a picked class of our brave sailors afloat, and of the security it would give our merchants in their foreign transactions. As early as last April, I suggested this plan in the columns of the *New York Evening Post*, and submitted it to the consideration of

various distinguished members of Congress, whose approbation it secured. But in the condition of public affairs the proposition could not even be discussed. I hope that this Convention will think of it before they adjourn, and by resolution or some other way, give it their endorsement. It is material to the prosperity of the Pacific Railroad. I need say but one thing more on this head. The French Government, whether the idea was original with it, or went from this country, I do not know, has recently adopted the plan, and has placed a number of its wooden steam sloops on distant mail routes to carry treasure, passengers, and mails. Strange to say, that while in the construction of river and lake steamers we are far in advance of all other nations, in our oceanic enterprise we are far behind them. Even the cities of Bremen and Hamburg have more mail packet steamships afloat than the United States.

Is there any difficulty in the construction of this road? None worthy a doubt. The numerous governmental surveys, many of them made by engineers whom we now recognise as heroes, have settled the general question. The grades for a great portion of the distance are almost imperceptible. The materials are at hand, and of sufficient cheapness to give assurance of an economical construction. More than this, it is now demonstrated that railways may be built at a far less cost than formerly. One hundred and thirty-seven new railways are about to be commenced in the small islands of Great Britain, under the inducement that they may be built for nearly one-half less than they formerly were. Have we laborers in sufficient numbers to accomplish the work rapidly. This problem is solved by the fact, that we shall have at the close of this war nearly a million of men, who have been injured to fatigue, and the toils of the pick axe and the spade, who have not only shown a love of adventure and action, but the qualities of endurance and resolution. The employment will be congenial to their newly acquired taste and habits, and ensure liberal and profitable remuneration. Emigrants from abroad will flock towards this line of industrial competition, just as when our canal system was commenced, or the gold of California was discovered. As the work will be continuous for many years, we may expect to see colonies settling around the local stations, each station a village or city perhaps, ganglions, knots, and supports to the great nerve which is to thrill with life, to become supports to it as it extends, and braces as it reposes, the great sympathisers with its activity and life. Nor is the work too gigantic in itself. It is said there were giants in other days. I think I can see such now. The American railway system was a Titanic labor, but it was completed. In the ten years ending in 1860 its progress was unexampled. In 1850, the number of miles of railway in operation was 8,588 79-100 miles, at a cost of \$296,260,128, about the amount of the whole specie in the country. In 1860, the number of miles was 30,952 72-100, the cost \$1,134,432,909, an increase in mileage of 22,000 8-100 miles, and of construction \$838,192,781. And four-fifths of this increase of these lines and this expenditure were in the loyal States of this Union, that having been their proportion in pretty much everything but political power, in whatever has been accomplished for the prosperity and glory of this Republic. In this honorable career of railway enterprise, the State of Ohio has led the van, having about 3,400 miles of rails laid within her limits. Illinois comes next with 2,854, New York next with 2,600, Pennsylvania with 2,300. Michigan with 1,673, Indiana with 1,284, Wisconsin with 803, Tennessee 837, and Missouri with 657.

In comparison, then, with the annual amount of money expended on railways during the ten

years mentioned, and the increase of mileage 22,000, the work of constructing a railway to the Pacific appears to be but a very simple and easy undertaking. If 22,000 miles of these new railways could be made in so short a time, and \$900,000,000 readily found for their construction, can we not build one not the tenth part of the distance within ten years, and especially when the greatest part of the money is advanced by the Government? In this view of the subject our greatest difficulties absolutely disappear.

On this point, indeed, we need not entertain a doubt. Nor am I without hopes that the road will be found shorter in its lines, much shorter than has been anticipated. The very best surveys we have were made under great disadvantages, and are by no means such as would answer for working plans. For a great part of the distance the difficulties are quite inconsiderable. It is in crossing the mountains we shall meet our crosses. If we could find a straight line between the 100° or 102 degrees of west longitude and the parallel of San Francisco, it would be but about 23 degrees of longitude in extent, or calculating the distance in miles, at from 40 to 50 miles to a degree, on the parallels of north latitude 41 and 42, so that by the actual measurement, the road would not be 1,200 miles in length, could be made in half the contemplated time, and cost perhaps not half the money. I trust that while the road is being constructed from the 100° westward, more deliberate surveys may be made with the purpose of shortening the route, and if a tunnel should be necessary at some point in the mountains, it would be no more than the French engineers are constructing at Mount Cenis, in the Alps between Sardinia and France.

The question which must occupy us first and most seriously, is the financial one. Can the money be had in quantity fast enough and large enough to construct the forty-mile sections from time to time, so as to entitle us to the corresponding credits to be loaned by the Government. I have regretted that the shares were not placed originally at \$100 each, instead of the present amount of 1,000.* For a long time the public will not regard their investments in the stock as a source of immediate personal gain, though the day will come they will lose their breath in racing after it as an investment. When you address capitalists as such, you must show them a probability of the payment of interest within a reasonable time; when you appeal to patriotic minds, and the higher sentiments which overlook private interest for the sake of the public good, dividends may be left out of the inducements altogether. Let us explain for example. The city of New York with all the peculiarities incident to a compact, competing, heterogeneous population, has some noble elements underlying all its faults, and in emergencies it is as sure as the foundations of the earth itself. So that whenever you can make a platform on which all can stand and all have an equality of nobleness, you may be sure it will be crowded by its citizens. I believe that almost every respectable inhabitant in New York whose labor or whose income is equal to one thousand dollars a year could be persuaded to subscribe at least one hundred dollars to this stock, with a perfect willingness to consider it as a donation, if it was necessary, or to sink it altogether. It was done when the Erie Railroad some years since was on the brink of ruin, and the citizens of New York called on at public meetings and in their wards, freely gave their aid, and knew their money would never come back to them. So are there, as I have already said, thousands who will give \$100 to the Pacific Road who are not able to give \$1,000, and who are willing to

* The commissioners adopted this idea, and will apply to Congress at its next session for the reduction.

go to that extent, but are unable to go beyond it.

As to the general financial ability of this country to construct this work, I have not a single doubt. I have already shown what in ten years has been accomplished, and that, too, in the face of money panics and commercial revulsions, which were the effect of ordinary causes, and are attributable to the want of skill and prudence for the time being, in those men and those operations, that, in a career of prosperity are little restrained by wholesome caution, or the lessons of experience. Now the condition of war has compelled a new system of expenditure, and a basis of paper money to meet it. Whether we are bullionists or not, we must admit that no great war was ever carried on with gold and silver only. The French people overturned their monarchy with assignats, our forefathers freed themselves with continental bills, the English, who have shown such a tender sympathy for us in our financial necessities, carried on her great wars with France with very shabby looking paper. The Bank of England notes were made a legal tender, whilst gold was at a premium of 30 per cent., and the silver currency depreciated at the rate of 9d. on 4s. 3d. Spanish dollars re-stamped at the mint were forcibly passed for \$1.25 cents of our money.

During the war of 1812-15, Mr. JEFFERSON proposed that our Government should issue \$200,000,000 of similar currency, and had it been done, the Treasury would not have been so enormous a loser as it was by the agency of bank credits and bank circulation.

Without much further drain for specie to remit abroad—for it would seem that the exports of the precious metals no longer assume the proportions they did a month ago, with the fact staring us in the face of large and increasing exports also of American cereals and other products, larger during the last month than for any corresponding month in several previous and prosperous years, with a supply of treasure from the Pacific coasts of amounts equal to all we remit—we may safely calculate that there is and will be coin enough at home to resume its customary and useful office as soon as the war is closed. But as matters now stand, while the Government is expending from one to two millions a day, and these millions go into the hands and pockets of our own people, I aver the country, as a whole, is getting richer in its available means than ever it was before. We know the curious and universal estimate of the nature and offices of coin. It is the theme of philosophers, the study of bankers, the average adjuster and balance settler of the foreign merchant, his guide and his idol. But, notwithstanding, in the every day business of life, in the conduct of large transactions gold may be a nuisance. Some gentlemen in this convention could not carry the gold they represent if they had the strength of Hercules. It is almost as cumbersome as the Lacedemonian currency, and is literally carted about in Wall street in nearly the same way. Policemen walk alongside of the heavy boxes to see that they are not stolen; porters rush out in squads to lift it carefully into the vaults; it lies there for months and years, and no one ever sees it. It is the poor, much abused, and soiled paper money, that goes cheerfully out into the world to do the work of this concealed and idle treasure. Paper and credit have built our cities and railways, paper and credit are now fighting the greatest battle ever waged for national existence; they are still adequate to the performance of their duties, and are now and ever will be the medium of all extensive trade and commerce, in spite of all the denunciations of of men who do not comprehend the diverse wants of mankind, nor care for their necessities, nor appreciate the suddenness of human changes. To say that a dollar of property has no value unless convertible at once into a dol-

lar of gold or silver, is just as absurd as to say that a bushel of wheat in Chicago is of no value unless the bushel measure goes with it. Whatever paper the Government puts forth in this contest is as yet in the country, and must be invested by those who ultimately retain it as property. It is the sum of all securities, and therefore the best. A bank note is referred for redemption to the capital of a few; a government bill has every foot of land, every atom of personal property, every man's labor and every man's industry and brains pledged for its final redemption. Those who want gold to settle a foreign balance, or make a purchase abroad, may well pay for it, and a large premium at that. It is now become a commodity, as the bullionists and money dealers have chosen to consider it. They are all happy, I trust, in the consideration, that whatever coin is worth is now paid them for it. Let them comfort themselves with their own maxims, and admit that according to their own theories gold is now occupying its just place and power. We are content. If we want a barrel of flour, we will pay the price, if we owe a house in Liverpool who will not receive our flour for its saleratus or brass buttons, we will send it the gold and pay its price. But of a practical and efficient currency we never had a better than now, and it is believed that the country can absorb and profitably use all that is afloat and much more. It was never more plentiful in a better time. It will enable us to build this road, if its friends can be enlightened as to the character and consequences of this great work.

But to conclude, as we may obtain a better idea of a great structure by viewing it from a distance, than by looking up at it from its door-way, so of this project, we may best comprehend its grandeur by a slight change in our angle of vision. As the end of the present century it is calculated that the United States will contain a population of one hundred millions of people. What will be then the aggregate wealth of the nation no one has computed. Whatever it is now will be then in the ratio of one hundred millions to twenty-seven, and equal to all the responsibility which in the course of events may fall upon it. We shall leave our descendants no petty patrimony of a crowded birth-place and room scarce enough to struggle in, but a continent accessible to every son and daughter of industry, and without a limit to the energies of posterity. We must not think this so formidable an enterprise, nor be alarmed at undertaking it. If we leave posterity a war debt to pay off, we give them the means to do it with. There are no doubt many conservative and over-timid minds that shrink from the very idea. So there were when the great Clinton projected the Erie Canal, and was told that it would never be filled except with the tears of a ruined people. So in our own city of New York. The Croton water system had honest opponents, who predicted that it could never be carried into effect except at the risk of bankruptcy; men of prudence they were, who preferred the safer course of buying water from the tea pump at a penny a bucket, to the hazardous one of bringing a large country river into town. So of the Central Park, a monument of a refined and philosophic spirit, so crowded with grateful visitors, that an admission fee of half a dime each would produce a revenue of \$200,000 a year.

The Panama Railway, which is a faint adumbration of the Pacific, was a wondrous undertaking. But its capital and cost of about \$7,000,000 are now practically equal to \$40,000,000, on which interest is earned regularly and large dividends paid, while a fund is accumulating for future distribution and profit. I do not pretend to foresee what will be the dividend value of the Pacific Railroad to its stockholders. But when even Europe may traffic with Asia more securely, with more rapidity, and with

more profit than by any route in the old world by sea or land, and when the distance from London to Canton, as now navigated, is 18,000 miles, and from New York to Canton will be but 11,000, I perceive that New York has advantage over London which must inevitably tell on the future of both cities, and end in the supremacy of that mart which commands the greatest trade. The business of this Pacific road will certainly enrich this country "beyond the dreams of avarice." What towns, what villages, what pastoral wealth will be added to those it already possesses, and out of these what new free States will emerge into life and greatness!

What innumerable auxiliary lines will branch off from the main trunk to newly discovered and fertile plains, to happy valleys, and to the exhaustless mineral wealth which lies yet "unprospected" in the teeming Sierras and the gorges and golden sands of the rivers which sweep their bases. What is to prevent millions of oppressed Europeans from abandoning their ties to the soil which gives them black bread for their daily food, and demands all else for their rulers; what is to prevent them from a general hegira to the regions of gold, when the transit will be so safe, easy, and economical, and wages may be earned at every mile of the way? In the direct advantages to ourselves, we may estimate the time saved in crossing to the Pacific Ocean and going to the Eastern world, the saving of expense in freights, in insurance, in labor, the increased supplies of gold, the shifting of capital from Europe to the United States, the general distribution of means to live and to enjoy life, the advance of the useful and refined arts, the closer connection of the States, the consolidation of the principles on which our political fabric rests, and our entire independence of the effete European systems under which man has so long been kept down and "made to mourn."

All these results we may safely anticipate. The present troubles we are encountering will prove blessings in disguise. In all ages and countries, principles important in their day bring forth their fruits at maturity. Waters long undisturbed become stagnant, and we should lay these trials to heart like philosophers, or what is best, like Christians. Many of the best elements in the American character hitherto dormant and unvalued, are coming forth with an unsurpassed splendor. Fortitude, courage, persistence, self-denial, generosity, patriotism, ability, these have at last come to the front, where, I trust in God, they will remain, not again to be driven into the shade by political managers, who are forever "purring and mousing after petty schemes of political advancement."

Some of these qualities of the American character are showing their power in the development of this work we have in hand. We are to lay out and construct the longest continuous line of railway in the world. Its milestones, if I may be allowed an Irish license of speech, will be set along the parallels of longitude, which will be hourly passed by the trains, at a speed proportioned to their distance apart. Those travelers going west will enjoy a prolonged twilight, those coming east will have an earlier day. The journey will not be more than we shall have taken, who come hither from New York and are about to return. Finally, the revenue, the commerce, the crowds, the wealth, the prosperity, the national supremacy that this road will give birth to, overpower the most lively imagination.

Permit me to say in excuse for much I have said, I am not unfamiliar with the organization and construction of railways. I believe our treasurer, as well as myself, might cite one memorable example of a road with which we were connected which has fulfilled all its early promises, and never knew any serious

impediments.* But railroads can now be constructed so cheaply in comparison with their former cost, that I believe we can in this instance keep within the estimates. In England, as I have stated, there are 138 new railway lines seeking legal existence from Parliament on the ground that they can now be built so economically, as to insure ample remuneration to the stockholders, and so it will be here. I can say with confidence, as I do with pleasure, that the selection we have made of a treasurer is a great move in the right direction, one that will give the public the assurance, that this road is commenced in earnest, that it will be honestly managed and that it will have no serious financial difficulties which can not be overcome.

Before taking my seat, thanking you for the attention you have given me, I beg that the following letter, from an eminent banker and citizen of New York, may be read by the Secretary. It was handed to me a few hours before I left the city. It is from a gentleman who, in the hereditary possession of a great name, ably wears its honors, and with universal acceptance:

[A letter was then read by the Secretary, addressed to the speaker, proffering the friendly address of the National Bank, signed by JAMES GALLATIN, Esq. It was received with applause, and ordered placed on file with other documents which were presented for their consideration to the Convention of Corporators.]

* Albany and West Stockbridge.

MONETARY & COMMERCIAL.

The military operations of the past week or ten days has had a very favorable effect on the money market in New York, gold having declined and a corresponding advance having been made in Government and other securities. There is a very large amount of capital seeking investment in all the leading money centres, at low rates. The demand for loans from acceptable borrowers is exceedingly limited, and first class paper is sought after at 8@10 per cent.

Exchange was in demand and rates firm. Quotations:

	BUYING.	SELLING.
New York Sight.....	par	½ prem.
Boston.....	par	½ prem.
Philadelphia.....	par	½ prem.
Baltimore.....	par	½ prem.
Gold.....	20 prem.	22 prem.
Silver.....	15@16 prem.	18@19 prem.
Demand notes.....	18 prem.	

The general business of the city has been good, and in some departments slight improvements have taken place. The coming election, the draft and other military matters, have taken up a good deal of the attention of business men of both town and country. There has, however, been a fair business done and at good profits.

Leading groceries have advanced in this market in consequence of the changes in the New York market. Sugars have gained ¼c. advance and are quoted at 10½@11½c. Refined yellow sugars at 12c. Coffee sugar at 13c. and crushed at 14c. The advance in coffees amount to 1½ and quotations are now 23½@25½. These prices must necessarily produce a curtailment of consumption in these articles, which will reduce our expendi-

tures for them as a nation to the previous standard.

The dry goods merchants have been selling freely at advanced rates, and those fortunate enough to have large stock on hand have realized handsome profits..

Flour has advanced 10 cents per barrel. Superfine is generally held at \$4 30, with a good market at \$4.25. Extra is quoted at \$4.35@ \$4.40. Family at \$4.50@ \$4 60, and fancy brands 25c. above these figures. The shipments are mainly on orders from regular customers, and run on the high grades.

Wheat has had a steady market and Red has gained 1c to 2c per bushel in price, being firm at 86c to 87c for prime. White is quoted at 90c to \$1 for fair to strictly prime

Corn has kept very even during the week; 38 for shelled, 39@40c for ear.

Oats have advanced, and are now 3@4c higher. New are quoted at 43c and old at 48c.

Barley is quoted at \$1@1.05 for Spring, and \$1.05@ \$1.10 for fall.

Mess pork has met with good inquiry at \$9.00, holders, however, became firmer, and buyers had to yield to an advance of 25c per barrel. At \$9.25 there were considerable sales of city packed; \$9.50 is now asked. Sales of bacon shoulders were made during the week at 4½ loose. These operations stiffened the market, and prices advanced up to 4½ to 4¾c. Bulk shoulders have been dealt in to some extent at 3¾ to 3½ c.

Bacon sides are quoted at 5½c, though sales have been made at 5¾c during the week; Bulk sides command 5c. Prime city lard is quite firm at 8½c with little offering at that figure.

The New York Times in its review for the week ending October 4, gives the following table as denoting the further extraordinary rise on the railway and State shares and bonds at the Stock exchange accompanied by a magnitude of transactions from day to day, seldom equaled in the movements of speculation in Wall Street. The heaviest amount of sales was on Saturday; and while, in the middle of the day, there was some signs of a reaction against prices, the closing business in the afternoon not only restored, in many cases, the quotations of the morning, but gave evidence of an unabated interest in the upward course of the market.

COURSE OF THE STOCK EXCHANGE FOR THE WEEK.

New 6 ¢ cent stock of U. S. of '61.....	101 ½ @ 104 ½
New York Central.....	99 ½ @ 105 ½ @ 104 ½
New York and Erie.....	46 ½ @ 47 ½ @ 57 ½
Erie preferred shares.....	80 ½ @ 86 ½ @ 84 ½
Rock Island.....	75 ½ @ 83 ½ @ 82 ½
Michigan guaranteed.....	71 @ 80 ½
Michigan Southern.....	36 ½ @ 44 ½
Michigan Central.....	78 @ 87 ½ @ 84 ½
Toledo.....	65 ½ @ 72 ½
Galena.....	78 ½ @ 84 ½
Illinois Central.....	73 ½ @ 82 ½
Panama.....	14 ½ @ 14 ½ ex div.
Pacific Mail.....	117 ½ @ 128 ½
Missouri.....	48 @ 58 @ 56 ½
Tennessee.....	50 @ 58
Hudson River.....	58 ½ @ 62 ½
Harlem preferred.....	46 @ 49
Cleveland and Pittsburgh.....	34 @ 36 ½ @ 45

While one party is operating for the rise on the currency theory, adverted to in another place, a second class of Bull speculators take

the more tenable ground that the improved, and, in many instances largely increased business on the railways, together with the accumulation of private wealth by reason of an active commerce and enormous war expenses at home, should largely increase all dividend-paying securities, and give a higher market value to such of the railway stocks as seem to be rapidly approaching a steady dividend-paying basis. One of the arguments advanced by the latter is, that our railway system is practically completed, and no material further issue of bonds or shares is likely to come on the market. At the same time a considerable supply of new material for speculation on the Stock Exchange has been derived from the successful reorganization of the Western lines, which were broken down in their finances some years ago.

The import entries of the week, including the dry goods table in our Saturday's paper, were \$4,589,997, against \$1,690,352 same week last season. The exports of domestic produce, \$3,870,460 against \$3,042,333 same week last year. The export of specie \$713,000.

The tables of the foreign trade at New York, published a few days since, make the import entries, exclusive of Specie, for eight months of the calendar year:

Jan. 1 to Aug. 31, 1862.....	\$119,484,000
Add five weeks since Sept. 1.....	21,854,921
Total to date, 1862.....	\$141,338,921
Against same time, 1861.....	101,327,721
Increase since Jan. 1.....	\$40,010,500

The same table makes the export clearances of domestic produce and miscellaneous goods, including foreign articles re-exported, from

Jan. 1 to Aug. 31, 1862.....	\$91,211,000
Add five weeks since Sept. 1.....	17,392,861
Total to date, 1862.....	\$108,603,861
Against same time, 1861.....	98,571,819

The exports of specie from

Jan. 1 to Aug. 31, were.....	\$40,756,000
Add since 1st September.....	3,753,000
Total to date, 1862.....	\$44,513,000
Against same time, 1861.....	3,219,000
Increase since Jan. 1.....	\$41,234,000

BUSH & LOBDELL, Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

—AND—

TYRES, FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled A

In the best Manner, at the Shortest Notice,
Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition The well-earned reputation of this Road for
SPEED, SECURITY AND COMFORT Will be more than sustained under the reorganization its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio River and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Baltimore, O.
I. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

**NEW YORK, BOSTON,
AND ALL EASTERN CITIES,**
CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6. CHARLES MINOT, Gen'l Sup't

W. MORRILL. G. B. BOWERS

MORRILL & BOWERS,

(successors to and members of the late firm of
C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

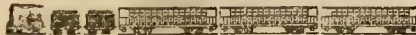
Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men on the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that same will be prepared to give entire satisfaction.

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
ONE TRAIN RUNS DAILY (430 MILES.)
VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.
ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburg with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "PA. PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
D. A. STEWART, Freight Agent, Pittsburg.
CLARKE & CO., Transfer Agents, Pittsburg.
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J. E. MOORE, Louisville, Ky.
W. W. AIKMAN & CO., Evansville, Ind.
R. F. SASS, St. Louis, Missouri.
CLARKE & CO., Chicago, Illinois.
W. H. & E. L. LANGLEY, Gallipolis, Ohio.
G. B. NEAL, Parkersburg, Virginia.
HALL & CO., Marietta, Ohio.
H. S. PIERCE & CO., Zanesville, Ohio.
McDOWELL & McCORM, Portsmouth, Ohio.
R. McNEELY, Maysville, Ky.
J. P. JOHNSTON, Ripley, Ohio.
JOHN TODD, Covington, Ky.
G. L. HEATON, Cleveland, Ohio.
R. C. MELDRUM, General Travelling Agent for the South and West.

LIVE STOCK.

Driver and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
L. L. HOUSTON, Gen'l Ticket Agent, Philadelphia.
H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:00 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton. RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day., Toledo & Day. Huntsville.....	5:20 P. M.	10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY Night in place of Saturday night.
Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	6:00 A. M.	11:10 P. M.
Indianapolis and Terre Haute.....	6:00 A. M.	11:13 P. M.
Decatur, Springfield & Quincy.....	11:30 A. M.	3:40 P. M.
Chicago Night Express.....	6:30 P. M.	16 00 A. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	5:00 A. M.	10:05 P. M.
Seymour Accommodation.....	2:00 P. M.	1:15 A. M.
Louisville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Om nibuses call for passengers as usual.

P. W. STRADER,
General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

W. H. L. NOBLE,
General Ticket Agent Indianapolis & Cincinnati Railroad.
E. F. FULLER,
General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET
NEW YORK.

ALBERT BRIDGES.

JOE

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.

Tube CLEANERS, Steel Wire and Whalebone BRUSH-

Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enamelled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warm-
ing Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Piaz-
za Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.
Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,
28 Platt Street, New York

N. W. BALDWIN, MATHEW BAIRD.
M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured, with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned

THEODORE DEHON,
Broadway, New York

EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



**LOCOMOTIVE & RAILROAD
CAR SPRING**

MANUFACTURER,

WILMINGTON, DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, low-priced FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being alike on both sides, impossible to unravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.

WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

—AND—

Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.

Sut. 2. MOSELEY & CO.

JAMES FOSTER, Jr. & CO.,
MATHEMATICAL AND PHILOSOPHICAL INSTRUMENT MAKERS,
S.W. CORNER FIFTH AND RACE,

Cincinnati, Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

H. TWITCHELL.

JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase.

Ag 4, m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,
Engine and Car Axles, Pump and Piston Rods
Bar of all Sizes,
And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works.

June 9.

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING
LOCOMOTIVE ENGINES**

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, President.
WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1½ to 10 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from ½ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas, Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—from 4 to 24 inches diameter, and branches, for same, &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER,
THOS. T. TASKER, JR., S. P. M. TASKER,
HY. G. MORRIS.

BUTLER'S

MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroad offices for the South and West. For sale by 1,000 leading Stationers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, OCTOBER 16, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion.....	\$1 00
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
“ column, single insertion.....	5 00
“ “ per month.....	10 00
“ “ six months.....	40 00
“ “ per annum.....	80 00
“ page, single insertion.....	15 00
“ “ per month.....	25 00
“ “ six months.....	110 00
“ “ per annum.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have scuttled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.

Cincinnati, Hamilton & Dayton—

Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	6.45 P. M.

Dayton, Lima, Toledo & Hunts-

ville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	8.10 A. M.
Eastern Night Express.....	10.00 P. M.	5.40 A. M.

Sandusky, Dayton & Cincinnati—

Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.10 A. M.

Marietta & Cincinnati—

Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.00 A. M.

Ohio & Mississippi—

Mail.....	5.00 A. M.	10.05 P. M.
Seymour Accommodation.....	2.00 P. M.	1.15 P. M.
Express.....	5.00 P. M.	5.53 A. M.

Indianapolis & Cincinnati—

Mail.....	6.00 A. M.	11.10 A. M.
Chicago Express.....	6.30 P. M.	10.00 A. M.

Dayton & Michigan—

Toledo, Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.00 P. M.	10.10 A. M.

Cincinnati & Chicago Air Line—

Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.

Cincinnati, Wilmington and Zanesville—

Morning Express.....	10.40 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.

Kentucky Central— (City time.)

First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

THE COTTON SUPPLY.

Manufacturers in all parts of the world are beginning to be sorely puzzled about the future supply of cotton. Hitherto the old stock was sufficient for the requirements of trade, a market for manufactured goods being more in demand than cotton; and spinners could afford to talk about cotton supply without action. Now they must act, whether they talk or not, as the stock of manufactured goods, after a year's drain, is beginning to run low. There is still, however, sufficient of the old stock on hand to supply the demand for many months to come, and, perhaps, until the cotton of the South is liberated, which may be much sooner than is dreamed by the people at large. When the war broke out the markets of the world were largely overstocked with manufactured goods, and the owners thereof have been largely benefited in consequence, by finding a sale for their wares at greatly enhanced prices. The want of English cotton spinners, therefore, was not at first so much the want of cotton, as market for their goods. The cotton they are now finding, and consequently they will soon want the former to keep their laboring millions from starvation.

The English manufacturer has long wished to be independent of this country for his supply of cotton, and has sunk large sums of money in India in railways, &c., in order to accomplish the wish of his heart; but hitherto, his success has not been great. The reason is, perhaps, that he has not gone the right way to work. In a barbarous or "semi-barbarous, or even in a half civilized country, agriculture or manufactures can not flourish without organized labor. In other words a system of labor, akin to American slavery, is the only one that can obtain from an uneducated and unlighted people that continuity and regularity of action that is necessary to produce great results in agriculture. Had the English set to work, not to enslave the East Indians, but to organize among that people a judicious and carefully arranged system of labor, by which every person over twelve years of age would have been made to earn something more than his or her daily board, as among the slaves of the South, they would now be quite independent in their cotton supply. But as it now is, but little in advance of former supplies of that precious commodity is likely to be received from that country.

The Chamber of Commerce of Manchester lately held a meeting upon this subject, at which Samuel Laing, Esq., late a member of the Queen's Indian Council, presented his views on the question. His testimony, however, could not be considered very encouraging to the hopes of those who look to India as the chief future supply for cotton. Mr. Laing said:—

"By this time it was pretty clear both what India could and could not do. It could not furnish a substitute for the 4,000,000 of bales of American cotton which had been suddenly withdrawn from the commerce of the world.

Nor would it be reasonable to expect that India could do this when it is remembered that it took from five to six acres to produce a bale of clean cotton, at the rate of from 60 lb to 80 lb per acre. Even if all the railways were completed, and even if the Indian cotton grower had a guarantee as to price, it was quite out of the question that such an enormous transfer of labor and capital could be made from agriculture and other pursuits as to give an additional cultivation of something like 20,000,000, or even 10,000,000 of acres in the course of a year or two.

These views are certainly very sound, and it seems strange that any one could be found who could expect that so large an operation as the production of four million bales of cotton could be transferred from one country to another in the space of a year or two, or even a quarter of a century.

But there are other objections in the way besides the magnitude of the work, which Mr. Laing thus explains:

"It was quite clear that in India there was a great extent of country where cotton of every quality, especially Egyptian, could be grown, always provided that the price was sufficient to warrant the diversion of the land from other tropical produce. But it was questionable whether cotton would ever maintain a sufficiently high price after the present scarcity was at an end. He had some doubts on that point himself, and also as to cotton being largely cultivated on an extensive scale by European planters. In India cotton was more on a level with ordinary agricultural produce, tea, such as rice or linseed. The cultivation of for instance, and other products might be made more profitable by the ordinary planter; but where cotton was grown and would be grown in India was more on the small farms of the ryots than by European planters on a large scale. The ryot possessed his own bullocks and plough, his own labor; he did the hoeing himself; his wife and children were there to do the picking, and the consequence was that he could produce cotton at an exceedingly low price."

The true secret, however, after all, is perhaps the unprofitableness of the production of cotton in a country so far away from the point of its manufacture. Had England turned her attention to Nicaragua, Grenada, or other Central American States, she would have been much more successful in obtaining a supply that would have interfered greatly with the Southern States. The writer of this, in a conversation with a very intelligent Mississippi cotton planter a year or so ago, was assured by him, and he was well informed on the subject by a long residence in the tropics, that with organized labor, he could raise in any one of the Central American States cotton enough to supply the world at rates far below the cost in Mississippi and Arkansas. The cotton plant then is perennial and blooms the year round, and produces in the greatest abundance, and with little labor, cotton equal to the average of our Southern States. The principal labor is gathering, ginning and trans-

porting to market. Why this country has not attracted more of the attention of the seekers of the cotton supply, is a mystery that we can not fathom. But should the President's project of Negro colonization be carried out, we may in future hear much more of that country and its cotton growing qualities than at present. Walker and his Confederate pirates were well aware of the capacities of that region for the production of cotton, hence their great desire for its conquest, and the introduction of African Slavery. It will be safe therefore, we think, to conclude, that if our own Southern States are ever seriously interfered with in growing cotton, it will be by the States of Central America.

As to substitutes we have no idea that any will ever be found. The fiber of cotton possesses qualities that no other fiber yet found possesses, and we do not see how it can be superseded for spinning purposes. But we shall reserve what we have to say on this subject to another article with the simple remark that if all signs do not fail, cotton now in the Southern States will be in market before the middle of the coming winter.

MADISON AND INDIANAPOLIS RAILWAY.

From the report of the above road for the year ending December 31st, 1861, we get the following: The earnings from passengers were \$49,336, freight \$70,050; total revenue, \$206,623; expenses, \$133,712; net, \$71,911.

Compared with the previous year, the gross earnings show a decrease of \$24,939 94; with an increase in expenses of \$2,223 90—making the decrease in net earnings \$27,168 84.

The receipts from transportation for the three months ending March 31, 1862, were \$52,962 18; and the expenditures \$28,811 23; the receipts from all sources during the same time were \$70,898 36; and the disbursements, including \$10,096 94 appropriated toward the payment of interest, \$51,773 58. The amounts due from the United States, State of Indiana, Post Office Department, &c, was \$2,319 27; and the balance in the treasury was \$16,805 61.

The following is a comparative statement of the earnings and expenditures for seven years:

	Earnings.	Expenses.	Net Earnings.
1855.....	\$268,133 33	\$149,351 33	\$68,833 00
1856.....	270,317 66	191,300 40	75,918 57
1857.....	212,614 44	149,249 96	63,414 44
1858.....	205,114 16	123,491 73	82,632 38
1859.....	205,554 44	121,275 27	79,479 17
1860.....	234,563 48	131,473 10	99,000 34
1761.....	203,623 54	133,712 01	71,911 53
Total.....	\$1,594,041 01	\$1,032,922 44	\$341,218 47

During the past year, in addition to a considerable amount of stone masonry, the company have laid over 50,000 cross ties; had 210 tons of T rail re-rolled, and 260 tons repaired; relaid 14 miles of track; built a new Howe bridge, 160 feet long, and two trestle bridges each 150 feet long—all at an expenditure of over \$27,000, the whole cost of which has been charged to repairs of road. The rolling stock has been kept in thorough repair, and large additions made thereto. All bills for the current expenses of the road, and the service rolls, have been fully paid.

The following extract from the report of the president to the stock and bondholders of

Indianapolis and Madison Railroad Company, (as reorganized,) made July 4, 1862, fully explains the present financial condition of the company:

The accumulation of over due interest, added to the fact that the principal of the bonds secured by the first mortgage would fall due May 1, 1861, rendered (as intimated in our last report to the Stockholders of the Madison and Indianapolis Railroad would be the case,) some arrangement with the creditors of that road necessary. As a preliminary the undersigned took the liberty of issuing a circular, dated March 11, 1861, addressed: 'To the Bond and Shareholders of the Madison and Indianapolis Railroad Company, detailing in short the situation of the Company, suggesting a plan whereby by a foreclosure and sale of the road, and the reorganization of a new company, not only would the holders of the first mortgage bonds be fully protected and secured, but something might be saved to the junior creditors and shareholders, and calling a meeting to be held at the office of Messrs. Winslow, Lanier & Co., New York, on the 10th of April, 1861.'

The meeting was held, appointed a committee to whom was referred the matters relating to the interest of the road and adjourned to meet at a subsequent day at the Astor House, in New York.

At the adjourned meeting the recommendations contained in the circular above alluded to were substantially adopted, and a committee was appointed to draw up an agreement and secure the co-operation of the holders of the first mortgage bonds, the junior creditors and shareholders of the Company, and act as Agents or Attorneys, in fact, for the purchase of the road when sold, and in the reorganization of a new company, under the laws of the State of Indiana, in accordance with the terms of the agreement.

Messrs. John Ferguson Elihu Day, and George Griswold, Jr., acting as the committee, secured the acquiescence of the holders of more than nine tenths of the first mortgage bonds, and that of a sufficient number of the holders of junior claims and of the shareholders, and then as Agents or Attorneys in fact, of those who signed the agreement, called upon Peter McMartin, Esq. upon whom the trust in the Mortgage deed had devolved, to foreclose the same and proceed to a sale of the road. Under the advice of counsel in Indiana the Trustee proceeded and obtained a decree of foreclosure and sale of the road, its property, franchises and appurtenances in the Circuit Court of the United States for the District of Indiana.

The road was offered for sale on the 27th day of March, 1862, and purchased by the Agents or Attorneys in fact, as aforesaid, for account of the parties to the agreement, and of such others as might thereafter be admitted to a participation of its benefits. A conveyance of the same having been made to the purchasers they were put in possession of the whole property covered by the mortgage and so sold, and having previous to the sale of the road also received a transfer by assignment, as provided in Item fifth of the agreement between the Madison and Indianapolis Railroad and its creditors, dated Aug. 1, 1861, of certain assets belonging to the Company not covered by the mortgage, as a further security to the holders of the first mortgage bonds, they did, on the 28th of March last, organize a new Company, as authorized by the laws of the State of Indiana, by the name of "Indianapolis and Madison Railroad Company," and conveyed to it all the property, rights and franchises purchased by them as

aforesaid, and appointed Frederick H. Smith, Nathan Powell, Wm. N. Dunn, Jacob B. McClesney, Peter McMartin, E. H. Miller, Elhu Day, John Ferguson, and E. C. Cauldwell, the first directors of said Company, and fixed the capital stock of the same at \$750,000 to be divided into 8,500 shares of \$50 each, of preferred stock, and 8,500 shares of \$59 each of common stock, and charged the new Corporation with the payment of the first mortgage bonds of the Madison and Indianapolis Railroad Company.

At a meeting of the new Company held on the 28th of March last, a majority being present, F. H. Smith was elected President, and the other officers of the old Company were appointed to the same positions in the new Company that they previously held in the old, and it being necessary to have an agency of the Company in the City of New York, Messrs J. & S. Ferguson were appointed as registers of transfer and general agents in that city.

The Directors also authorized the execution of a mortgage upon the road, its franchises and appurtenances, as security for an issue of \$685,000, to be known as the first mortgage bonds of this Company to be made and applied in discharge of the conditions made by the Agent or Attorneys in fact, of the Bondholders in the reorganization of the Company. Messrs. Peter McMartin and John Ferguson were appointed the Trustees, and they having accepted the Trust and become parties to the mortgage deeds, the bonds were made payable to them, and having been certified and endorsed, have been placed in the hands of the Agents of the Company in New York, for delivery to the parties entitled to receive them.

The road not having sold for enough to satisfy the bonds secured by the first Mortgage, the assets of the old Company which had been assigned to the Agents or Attorneys in fact have been conveyed by them to the Trustees of the first Mortgage and President of this Company, and are held by the Trustees as aforesaid, as an additional security to the Mortgage for the bonds secured thereby.

Certificates for Preferred Shares have also been prepared and placed in the hands of the Agents in New York, to be issued in accordance with the terms of the agreement, for 50 per cent. of the amount of the principal and interest due April 1, 1862, of Income bonds and certificates of Dividend Scrip of the old Company, which have been surrendered to the Agents or Attorneys in fact, and Preferred Shares will in the same manner be issued to the holders of the remaining Income Bonds and Dividend Scrip, when they shall be surrendered.

Certificates for Common shares have also been made and issued to the amount of one fourth, in the names of the parties represented as being shareholders on the books of the old Company, (that being the amount reserved to them in this Company by the articles organizing the same for their interest in the old,) and these certificates have also been sent to the Agent of the Company in New York, to be exchanged with the holders of the certificates for shares in the old company.

The undersigned hopes that by these proceedings, following so closely the suggestions of the circular issued by him, and before alluded to, the danger he so long and seriously apprehended of the stockholders in the old Company sustaining a total loss of their investment has been averted by the plan of reorganization, secured through the liberality of the creditors of the Company, it reserving to them a contingent benefit to be derived

from an increase at any time of the Company's business. Estimates being so seldom realized are but of little value, still the experience of the past five years makes it safe to say there is no reason to anticipate any change for the worse, but on the contrary much to hope for the better.

The office of the Company is at Madison, Indiana. The officers are: F. H. Smith, *President*; Thomas Pollock, *Secretary*; T. P. Matthews, *Treasurer*; and D. C. Branham, *Superintendent*.

LAW AND OTHER POINTS APPLYING TO RAILROAD TRAVEL.

The law that governs the relation of Railroad Companies to the public, as common carriers, is so imperfectly understood, that honest meaning men are often led into litigation, who have not had the least ground on which to sustain an honest claim, for damages caused by the company or its agents. Some leading points are therefore given, as proper in a publication of this character.

RIGHTS OF THE RAILROAD COMPANY.

The right to make and enforce rules for its own protection, among which are regulations as to the conduct of passengers; such rules must not conflict with common law or special enactments.

A company can not be held for damages resulting from passengers standing upon the platforms, or the putting of any portion of the body out of the windows; such conduct being against the rules of all Railroad Companies.

A company can not be held for any accident resulting from an attempt to get on or off a car while in motion. If, however, passengers should leap from a car under the influence of a well founded fear of a collision, the company is liable; but again if a passenger, being carried past the station where he desires to stop, jumps off without waiting for the train to stop, he does so at his own risk, the company not being liable for his imprudence; for "If a passenger is negligently carried beyond the station where he intended to stop, and had a right to be let off, he can recover compensation for the inconvenience, because these are direct consequences of the wrong done him."

A company can not be held for any accident to a passenger riding upon the baggage car, locomotive, or tender, even at the invitation of a person, (except the conductor) engaged in running the train, such passenger not being in his proper place. An individual riding free upon an engine, baggage car, freight or passenger train, by invitation of any of the persons working the train, except the conductor, can not recover from the company for injuries he may sustain; train hands having no right to permit any one to ride on any part of the train, either free or for pay.

If a company choose to carry passengers for a special time at a reduced rate, as during excursions, the tickets being good only for a certain number of days, or until a certain time, passengers are required to conform to that time, and tickets presented afterwards can be lawfully refused, as the contract has not been conformed to on the part of the passenger.

WHEN RAILROAD COMPANIES ARE LIABLE FOR LOSS OF LIFE OR INJURY TO PERSON.

1st. If caused by a collision with any train, or any obstacle placed upon the road

by the company's agents, or left there by their negligence. If, however, a collision occurred from crossing the road, the engineer having giving fair warning at the distance regulated by law and custom, action for damages will not hold, nor can recovery be had where the accident is caused by cattle straying upon the road, or from obstructions placed upon the road by malicious persons.

2d. If death or injury is caused by the breaking of a bridge; if, however, it is in proof and clearly established that the timbers of the bridge have been tampered with, or removed by malicious persons, the company is not liable.

3d. Where death or injury has resulted from a car running off the track but negligence of the agents of the company having charge of the track must be proved.

4th. If death or injury is caused by the breaking of a car axle.

5th. If death or injury is caused by the explosion of a locomotive.

6th. A company is liable for death or injury under any circumstances where it has resulted from the negligence of the company or its employees; but such negligence must be clearly proven.

LIABILITY FOR INJURY TO PERSONAL PROPERTY.

No damages can be claimed from a company for destruction of cattle upon its track, where the charter of the company or special enactments do not bind it to fence its track. The track is the exclusive property of the company, and cattle found thereon may be taken up as estrays.

All the baggage entrusted to the company's agents must, if lost, be paid for by the company; but it is incumbent upon the passenger to use all due diligence in getting and retaining proper proofs of its delivery; and where a company gives checks for the baggage entrusted to its agents, the passenger must attend to getting his baggage checked and retain the duplicate check. If he loses the duplicate check and it is found by another party, who gets the baggage, an action will not lay against the company for the wrong delivery. A reasonable time must however be given to the company to make search for such lost baggage. The owner of the baggage is a competent witness to prove its contents.

It is against the rules of all companies to take baggage into passenger cars, although it is done constantly by sufferance. Such baggage is at the risk of its owner.

Companies are not liable for valuable trunks of jewelry, money, or merchandise, unless special terms are made, by the owner with the company, or its agent; the liability of companies for lost baggage being simply for such wearing apparel, books, and other articles as are necessary for the journey.

Railroad companies are not obliged to make any exertion to recover any articles of baggage taken into a passenger car, nor liable for it, if lost or stolen, such action of a traveler being contrary to the rules of all Railroads.

A company is liable for damage to baggage resulting from careless handling on the plea of gross negligence on the part of the company's servants.

RIGHTS AND DUTIES OF THOSE WORKING A TRAIN.

A conductor of a train has absolute control over it, and is the superior officer of all engaged in working the train.

A conductor has a right to demand a sight

of his ticket from any passenger as often as he chooses to ask it.

A conductor has a right to put any passenger off a train for drunkenness, obscenity or acting in any disorderly manner, whether such individual has paid his fare or not.

A conductor has a right to put off a train any individual who trespasses any rule laid down for the safety of passengers, or the protection of the company, such as standing upon the platform, interfering with the bell ropes or car brake, etc.

When passengers are put off the cars for violation of rules, or for other cause, justifiable in railroad usage, care must be taken that the cars have stopped, otherwise a company is liable, if damages result to the person ejected, from the motion of the cars.

A company has also a right to discriminate between those who pay their passage on the cars or purchase tickets at the company's office, and a conductor may eject from the cars any individual who, in paying his passage on the cars, resists the payment of such additional charge per mile as a company may have seen proper to impose in such cases.

A conductor has the right of placing passengers for different points, in such cars as will most facilitate his collection of fares and tickets.

A conductor has no right to deprive a man of a seat which he has taken, and it is presumed paid for, not even for the accommodation of a lady.

A conductor has no right to take a passenger whom he can not furnish with a seat, unless the passenger, having been informed of the fact, is willing to take his chance.

The duty of the brakeman is to attend to the brake, and he should not be importuned with questions.

The place of duty of the baggage master is the baggage car. He has no right to give out baggage unless a check is presented; even if he knows that such baggage is the property of the person applying for it. He must handle all baggage with ordinary care, or the company is liable for damages for carelessness.

TICKETS.

Always purchase your tickets at the office before entering the car. You will save trouble and additional fare charged on most roads.

It has been decided that where a ticket is sold, good for a specified time, at a rate lower than that charged for those permanently good, the reduction in fare is a valid legal consideration, and the ticket can not be used after the time expires.

A case was decided by Judge R. P. Marion, of the 8th District Cattaraugus Circuit in New York, in which the ticket was "good for three days," and "for a continuous trip only," in which the party got off; waited for another train, seven days after, was charged fare, refused to pay, and was ejected. Action for assault and battery was non-suited, because of special terms of contract. Passengers who lose or mislay their tickets can be made to pay a second time—decided in a case before Judge Foote. Children between four and five years are usually charged half price.

BAGGAGE

Take as little baggage as possible. Unless going to stay at your destination for a length of time, a carpet-bag or valise will hold all you want, except your shawls, overcoat or umbrella. Baggage beyond what you can conveniently carry yourself is a constant expense. Railroads confine their legal responsibility for loss or damage to baggage to \$100. Always

check your baggage to the end of your journey if possible, thereby relieving yourself of all responsibility and care, and saving yourself hurry and worry when a change of cars occurs.

THE RAVAGES OF THE LIMNORIA TEREBRANS ON CREOSOTED TIMBER.

BY DAVID STEVENSON, F.R.S.E., M.I.C.E.

The following is an abstract of a very useful paper recently read before the Royal Society of London:—

The author stated that it would be difficult to estimate the value of any chemical or mechanical process whereby timber might be rendered permanently impervious to the ravages of *Limnoria terebrans*, that small but sure destroyer of timber structures exposed to the action of the sea.

The ravages of that crustacean were first observed in 1810 by Mr. Robert Stevenson, the engineer of the Bell Rock Lighthouse, in the timber supports of the temporary beacon used by him in the erection of that work. Having forwarded specimens of the insect, and of the timber it had destroyed, to Dr. Leach the eminent naturalist of the British Museum, Dr. Leach, in 1811, announced it as a "new and highly interesting species which had been sent to him by his friend Robert Stevenson, civil engineer," and assigned to it the name of *Limnoria terebrans* (Linnean Trans., vol. xi. p. 370; and Edinb. Ency., vol. vii. p. 433).

The *Teredo navalis*, which was a larger and even more destructive enemy, was happily not so prevalent in northern seas as the *Limnoria*.

Experiments made at the Bell Rock by Mr. Robert Stevenson, extending over a period of nearly thirty years, the detailed account of which was given in Mr. Thomas Stevenson's article on Harbors in the "Encyclopædia Britannica," had clearly proved that teak, African oak, English and American oak, Mahogany, beech, ash, elm, and the different varieties of pine, were found sooner or later to become a prey to the *Limnoria*. Greenheart oak was alone found to withstand their attacks; and even this timber was said in some instances to have failed.

Mr. Stevenson's experiments also included the testing of the artificial processes of Kyan and Pain, the former being an injection of corrosive sublimate, and the latter of proto-sulphate of iron. Timber prepared by Kyan's process was attacked in two years and four months, and in four years and seven months was quite destroyed. Timber prepared by Pain's process was attacked in ten months, and destroyed in one year and ten months.

The justly approved creosote process, patented by Mr. Bethell, had been largely employed in railway works, with universally admitted success; and, in common with many of his professional brethren, the author adopted it in several marine works, in the expectation that it would prove an antidote to the *Limnoria*; but having now ascertained beyond all doubt that creosote was not a universal or permanent preservative of timber used in marine works, the author proposed in the present notice to state briefly the facts on which this opinion was grounded.

Before doing so, however, he wished it to be distinctly understood that he did not undervalue Mr. Bethell's highly important invention as a preservative of timber against all ordinary decay incident to railway sleepers, timber viaducts, and indeed all timber struc-

tures not exposed to sea-water infested with the *Limnoria terebrans*. His remarks referred exclusively to its application for marine works below half-tide level. For all other classes of works he believed it to be a most valuable preservative.

In 1859, in a discussion which followed a paper on the "Permanent Way of the Madras Railway," at the Institution of Civil Engineers, the author first stated that there were distinct evidences of the attack of the *Limnoria terebrans* on creosoted timber used at Scrabster Harbor, in Caithness: while Mr. Bethell the patentee, and others, expressed their conviction that creosoted timber could not be perforated by any worm or insect.

Subsequent experience and observation have satisfied the author that the statement which he then made was correct; the fact, as now ascertained, being that thoroughly creosoted timber is, in certain situations, readily perforated by the *Limnoria terebrans*.

The first instance to which he referred was the pier at Leith, which was executed about 1860, by the late Mr. Rendel. The whole of the timber employed was creosoted on the spot in the most careful manner. As the piers at Leith were washed by a constant admixture of fresh water from the Water of Leith, the author expected that the progress of devastation at that place would be so slow as to be hardly appreciable on creosoted timber. But having carefully examined the West Pier, he corroborated the evidence given by Mr. A. M. Rendel in 1860, before the Select Committee on Leith Docks Bill, that notwithstanding the most careful application of creosote, the timber work has been attacked by insect to a great extent.

The second case to which he referred was Invergordon. Two steamboat jetties were constructed at that place from designs by Messrs. Stevenson. It was generally represented that there were little or no traces of marine insects in the Cromarty Frith, and it was resolved that it was a situation peculiarly suitable for employing timber pile work protected by creosote. The timber used in the work was carefully selected at Leith, and dressed to the necessary scantlings and lengths, so as to avoid all cutting after it had undergone the process of creosoting. It was then creosoted by an agent sent by Mr. Bethell for the purpose, at the sight of a careful inspector employed by the engineers. Every piece of timber was weighed before being put into the tank, and the process of creosoting was continued until each piece had received, as nearly as possible, the specified quantity of 10 lbs. of oil per cubic foot. Some experimental pieces were from time to time cut longitudinally, when it was found that the creosote had entered the ends of the logs 18 inches to 2 feet, and that it had saturated the timber some two or more inches all round. No greater precautions could possibly be used to insure perfection in carrying out the process, which involved an additional cost of about £450. The jetties were erected in 1858, and now the superintendent's report was, "that the blackened or creosoted portion of the timber is very much eaten and perforated. The timber perforated is just as it came from the creosoted tank, never having been cut. There is 1½ inches wasted on some of the piles that have been perforated."

The third case to which he referred was Scrabster, which was also constructed under Messrs. Stevenson's directions. The timber employed in this instance was selected Memel of first rate quality; it was carefully creosoted at Glasgow. On cutting up a timber that had been attacked by the *Limnoria*, it was

found that the creosote had fully entered at the ends and saturated the sides, and yet it was discovered to have been attacked after it had been exposed only 13 months—the insect perforating the blackened timber. The whole of the creosoted portion of the timber work was now more or less worm-eaten and destroyed. Mr. Leslie had also directed the author's attention to similar results at Granton and Stranraer, at both of which places the creosoted timber had been perforated.

The author held that these instances were enough to prove that the failure was not peculiar to one spot or one isolated case. If it was said that the timber used at these places had not been properly creosoted, it might fairly be concluded, that if the process, even when conducted in the patentee's own works, to the satisfaction of careful inspectors, was so difficult and uncertain in its results, its general applicability would be greatly injured.

All newly creosoted timber, whether it was well or ill done, presented the same appearance externally; and it was only by weight that the completeness of the saturation could be judged of; and if careful weighing before and after the timber had been creosoted was not to be held as an ample and satisfactory test that the process had been properly conducted, it seemed hopeless to expect that perfect satisfaction could be attained. But it was so far fortunate for Mr. Bethell's system, that it was needful in the cases to which allusion had been made to call in question the extent of saturation which his process secured when properly executed. The timber at Scrabster and Invergordon, and he believed at the other places named, was undoubtedly thoroughly and properly saturated; and the author said that the explanation of the failure was to be found in the fact, that the *Limnoria perforated timber which had been thoroughly creosoted and blackened*—a fact which at once disproved the assumption, heretofore so generally made, that the poisonous nature of the creosote would prevent the insect from attacking it. As the *Pholas* perforated stone to procure shelter, *Limnoria* might excavate timber for the same purpose, and obtain its food from the minute animalculæ with which the water of the ocean was charged. Dr. Coldstream in his elaborate paper on the *Limnoria* in the "Edinburgh New Philosophical Journal" for April, 1834, had concluded that the *Limnoria* fed on the timber, and not on animal substances; but even if this were so, there seemed no reason to conclude that creosoted timber could not be eaten by insects, on account of the poisonous nature of the preparation employed. The author stated, that it had been ascertained that there were insects that lived and fattened on food that was to man a deadly poison. "In the British Medical Journal" for April, 1862, there was an interesting notice on the subject. Mr. Atfield had there shown that substances which are intensely poisonous to the higher animals do not effect *Acari*, which he found not only readily ate, but actually fattened on strychnine, morphine, and other deadly poisons. But the author stated that the specimens which he had laid before the Society proved conclusively that creosote does not act as a poison in preserving the timber, because it could be seen that the *Limnoria* were embedded in wood still highly charged with creosote.

After carefully considering the subject, the author had no doubt that the process of creosoting preserved timber from the attack of marine insects only so long as the oil existed as a film or coating on the outside of the tim-

ber. Whenever the attrition caused by the motion of the sea removed this outer film or coating, and exposed the fibrous surface of the timber, the insect would then attack and perforate it, whether it were creosoted or not, its search being for a fibrous substance in which to burrow. The time that might elapse before the timber became assailable to these insects depended on the situation. Wherever there was little abridging action of the sea, the exterior film of creosote might be longer preserved; and where there was a considerable admixture of fresh water to check the growth, or at least the avidity of the insect, the effect of their ravages might be more gradual, or, in some situations, almost inappreciable. But the result of the author's observation and experience led him irresistibly to the conclusion, that on the northern shores of the country, where works are exposed to the open sea, creosoted timber was readily perforated by the Limnoria, and could not be safely employed in an important part of a marine structure at or below half tide level, a fact of great importance to the civil engineer.

THE LAWS OF MARYLAND AS TO THE KILLING OF CATTLE BY RAILROAD TRAINS.

Where cattle are killed by trains, the statute law imputes negligence to the company, and the onus is upon them to disprove it. Wherein the statute has, and has not changed the common law.

This action was brought by one Keech, against the Baltimore and Washington R. R. Co., in the Circuit Court of Prince George's county in the State of Maryland, to recover the value of two horses and one mule killed on the Washington Branch of the Baltimore and Ohio Railroad.

At the trial of the cause, the plaintiff offered evidence showing that the defendants, as charged in the plaintiff's declaration, killed the mule and horses by collision of the cars on the defendant's track, and the value of the property, and also evidence tending to show that the horses and mule were upon the track without any fault on his part, but that they were killed through the negligence of the conductor and engineer having charge of the train which caused the loss. The defendants then offered evidence tending to show the use of the greatest care and diligence on the part of its agents.

Certain instructions were given by the court, to which both parties excepted. A verdict and a judgment were rendered in favor of the defendants, and the plaintiff then appealed to the Court of Appeals of Maryland. The Court held that by the common law in order to maintain an action against a railroad company for injury to stock, it was incumbent on the plaintiff to prove that the damage resulted from the fault or negligence of the defendant or its agents; this has been changed by the Acts of Assembly of the State of Maryland, which cast the *onus* of proof on the defendant. But the well settled principle of common law, that a plaintiff is not entitled to recover for injuries to which his own fault or negligence has directly contributed, is not abrogated.

The following opinion was rendered at the decision of the case.

BENNETT, J. In the case of the *Baltimore and Ohio R. R. Co. vs. Keech*, we adverted to the well settled principle of the common law, that a plaintiff is not entitled to recover for injuries to which his own fault or negli-

gence has directly contributed, and we said that this rule applies as well to suits against railroad companies as private individuals, and is not abrogated by the acts of 1838, ch. 244, and 1846, ch. 346. To adopt the construction of these acts, contended for by the appellant, would entitle a party to recover damages for stock killed by a railroad train, although it should be shown that the accident resulted from the grossest carelessness on his part, or that he voluntarily turned them loose upon the railroad track when a train was passing. We can not impute such intention to the Legislature, nor can it be found in any reasonable construction of the acts of Assembly. It is a cardinal rule of interpretation, that "Statutes are to be construed in reference to the principles of the common law," for it is not to be presumed that the Legislature intended to make any innovation upon the common law further than the case absolutely required. The law rather infers that the act did not intend to make any alteration, other than what is specified, and besides what has been plainly pronounced.

Guided by this rule of interpretation, we can give no other construction to these Acts of Assembly than that which we have heretofore declared. They leave the question of negligence, on the part of the plaintiff, where it was at the common law, and do not confer upon a party, who is himself a wrong doer, the right to obtain redress for the consequences of his own negligence or misconduct. By the common law in order to maintain an action like the present, it was incumbent on the plaintiff to prove that the damage complained of resulted from the fault or negligence of the defendant or its agent. This has been changed by the Acts of Assembly. They cast the *onus* of proof on the defendant. When stock is killed by a railroad train, the law imputes negligence to the agents of the company, and in order to exempt itself from liability, it must be shown that the damage complained of was "the result of unavoidable accident." In construing these words of the act, we will remark, that we do not understand the Legislature as intending to interfere with the time tables of the company, or to limit the rate of speed for the trains. While the act leaves to the company the full exercise of its rights in this respect, it imposes upon them the duty of exercising the highest degree of care and caution. These principles were announced in *Lamborn's case*, in which this court said, the question of the fault or negligence of the plaintiff was a subject proper to be passed upon by the jury.

As some erroneous impressions appear to have grown out of the decision of that case, it may not be amiss to advert to some of its facts, which distinguish it from the case now under consideration. The record disclosed that Lamborn was the owner of land adjoining the railroad, that the horse was standing on the line of the road, near the track, and as the cars approached, he ran upon the track, and was overtaken and killed by the locomotive. No explanation was given of the circumstance, or any evidence to show that the horse was in charge of any one, or to relieve the plaintiff from the imputation of negligence which might be presumed from the facts of the case. * * *

Upon the evidence in this case (already stated,) we think the prayer asked by the plaintiff correctly stated the law, and ought to have been granted; but the judgment would not be reversed on account of its rejection, because the same proposition was embraced in the fourth instruction given to the jury. We find no error in the first instruction given

by the Circuit Court. These instructions (the 1st and 4th,) submitted to the jury the question of negligence on the part of the plaintiff, as well as on the part of the defendant, which was a proper subject for them to pass upon.

We think there was error in the second instruction, there being no evidence in the cause on which it was based. A similar prayer in *Lamborn's case* was ruled good, because there was evidence to support it.

The third instruction was also erroneous, because as interpreted by the appellant, it directed the jury that the defendant was not responsible, if the horses and mule were on the track of the railroad without any fault or negligence of the defendant or its agents; in the absence of fault or negligence on the part of the plaintiff, the exemption of the company depends upon its being proved that the collision took place without any fault or negligence on the part of its agents. This third instruction appears to have been copied from the fourth prayer in *Lamborn's case*. But when that case was under consideration, the 4th prayer did not receive either from the counsel who argued the case, or from the court, the construction which has been given to it by the appellant, in his argument here. It was construed as if the words "without the fault or negligence of the defendant" were meant to apply to the killing, and not to the horses being on the track; by transposing those words, or by a change in the punctuation, they might be so construed, and then the prayer would be free from objection.

It is plain, however, that the phraseology of the third instruction in the record before us is susceptible of the interpretation put on it by the appellant, and calculated to mislead the jury. * * *

Judgment reversed and a new trial ordered,

LOCOMOTIVE ENGINES.

The pressure at which locomotives are worked has increased greatly since the days of the Liverpool and Manchester contest. 45 lb upon the square inch was then thought to be a good pressure, whereas 145 lb. is more nearly the present standard. Within ten years, even, the pressure maintained in locomotives has increased by from 20 lb. to 40 lb., and we only a fortnight ago published details of a trip upon the Great Western of Canada Railway, wherein 160 lb. pressure was almost continuously kept up. Steam at even this pressure, however, is not worked beyond a moderate degree of expansion, nor can it be until means are provided for effectually preventing condensation in the cylinder. When this desideratum is attained, perhaps by means of some simple superheating apparatus, it may be practicable to work steam of 200 lb. or 250 lb. in 20 inch cylinders, expanding from 1-10th stroke instead of as now, obtaining the same power from 125 lb. steam cut off at two thirds or three fourths stroke in cylinder only 16 inches or 17 inches in diameter. In the former case, however, only one half the weight of steam would be used as in the latter, and consequently but half as much water would require to be evaporated, and but half as much fuel burnt. This direct saving of fuel is of some consequence, but its importance is perhaps less than that of the corresponding weight of boiler, water etc., at that same time effected, for it is evident that but about one half the weight of boiler would be required to evaporate 100 cubic feet of water per hour that now suffices for 200 feet. The saving of fuel, *per se*, can not now be very great in comparison with the

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N. Y. & Pa.	61	48	8	8	8	8	8	8	Maryland Sterling.	3,000,000	5			
Baltimore and Ohio.....	Md.	61	380	13,111,800	10,781,833	560,07	3,022,203	2,305,782	Sept. 30, 1860	Mortgage.....	2,000,000	6	95	1885	
do do										".....	700,000	6	84	1880	
do do										".....	1,125,000	6	90	1875	
do do										".....	1,000,000	6		1867	
do Washington Branch.....	Md.	20		1,050,000						1st Mortgage.....	701,000	7	55	1866	
ellefontaine and Indiana.....	Ohio & Ind.	118		1,550,813	1,250,750	139,10	314,000	8,705	Dec. 1860.	2d ".....	100,000			1870	
do do															
Buffalo and State Line.....	N. Y. & Pa.	122	68	1,950,350	1,040,000	27,51	911,019	492,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,979	21,073		1st Mortg. 1st Div.	505,000				
Camden and Amboy.....	N. J.	132	96	3,98,400	8,800,000		1,997,055	743,959	Dec. 31, 1860	1st Mortgage.....	450,001	6	100	1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,120,456	597,933	71,356	Aug. 1, 1859	1st ".....	800,000	7	62	1861	
do do										2d ".....	80,000	64		1865	
do do										3d ".....	95,000			1865	
do do										4th ".....	1,707,500			1866	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,125,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	100	1865 & 1870	
do do										2d ".....	600,000	100		1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,320	730,000	901,569	225,767	Dec. 31, 1860.	1st Mortgage.....	2,000,000				
do do										2d ".....	1,575,000				
Chicago and Milwaukee.....	Wis.			No report received.						3d ".....	1,000,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac).....	Wis.	104		2,207,756	7,333,403	50,366	720,705	230,119	Apr. 1, 1861.	2d ".....	500,000				
do do										Pref 1st Mor & S F.	1,250,000	7	80	Feb & Aug	
do do										Gen'l 1st Mortgage.	3,600,000	7	52	Feb & Aug	
Chicago and Rock Island.....	Ills.	63	175	5,603,000	1,397,000		1,161,018	455,953	June 30, 1861	2d ".....	2,000,000	7	100	May 1.	
Chicago, Burlington and Quincy.....	"	86	138	4,680,340	4,814,515		1,514,428	761,830		1st Mortgage.....	2,000,000	7	110	1870	
do do										Cons. 1st Mort. S F.	2,172,000	8	105	1870	
do do										2d ".....	2,172,000	8	105	1870	
do do										3d ".....	2,172,000	8	105	1870	
do do										4th ".....	2,172,000	8	105	1870	
do do										1st Mort. Chd. & Aur.	300,000			1869	
do do										2d ".....	300,000			1869	
do do										1st Cent. M. L. Tract	300,000			1864	
do do										2d ".....	245,000			1868	
Chicago, Iowa and Nebraska.....	Ind.	82		No report											
Cincinnati and Chicago Air Line.....	Ohio.	99	60	2,155,800	1,356,000		614,229	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d ".....	950,000	7	100	1880	
Cincinnati Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d ".....	532,000				
do do										3d ".....	101,000				
do do										Income.....	205,509				
Cleveland and Mahoning	Ohio.	68		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d ".....	4,000,000				
do do										3d ".....	241,000	8			
do do										1st Mortgage M. L.	8,000,000	7	100	1860	
do do										2d " M. L. or 1st Ex.	1,180,000	7	92	1873	
do do										3d " 2d Ex.....	1,165,000	7	81	1865	
do do										4th " 3d Ex.....	1,154,000	7	64		
Cleveland and Toledo.....	Ohio.	53	148	3,343,600	3,550,570	196,413	919,971	403,956	May 31, 1861.	1st Mort. Jun. 1st Div.	350,000			1867	
do do										2d ".....	203,000			1872	
do do										3d ".....	265,000			1862	
do do										1st " Tol. Nor & Cleve	521,000			1863	
do do										2d ".....	293,300			1864	
do do										Junction Income.....	44,000			1862	
do do										C. & T. Income.....	300,000			1864	
Cleveland, Columbus and Cincinnati ..	Ohio.	121	135	4,746,700	519,000	4,201	1,255,003	604,880	Dec. 31, 1861.	1st Mortgage.....	510,000			1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	125	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	504,000	7	99	1861	
do do										2d ".....	303,000			1862	
Columbus and Xenia.....	Ohio.	105	54	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700			1860 to 1866	
Columbus, Piqua and Indiana	"	103		In hands of Receiver.	2,512,000	993,267	375,002	212,107	Mar 21, 1860.	1st Mortgage.....	200,000	8			
Dayton and Michigan.....	"	142		2,176,666	2,512,000	993,267	375,002	212,107		2d ".....	2,112,000				
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000				
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000			1875	
do do										2d ".....	1,000,000	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	Iowa.	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,702	728,852	159,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		926,061	1,219,100	249,668	124,140			2d ".....	18,000				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d ".....	18,000				
Galena and Chicago Union.....	Ills.	73	121	6,028,360	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000			1862 & 1863	
do do										2d ".....	1,207,000			May 1, 1875	
Great Western	Ills.	175		1,000,000	2,391,000		4-5,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report					Land Mortgage...	5,000,000				
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573		Mortgage Conv.....	1,354,000				
Hannibal and St. Joseph.....	Mo.	206		1,041,066	10,554,000	229,306	990,907	512,933	Sept. 1, 1860.	1st Mortgage.....	927,000	6	30	1873	
do do										2d ".....	41,000,000	7	110	1869 & 1870	
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	2,000,000	7	100	1870	
Hudson River.....	N. Y.	51	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	2d S. F.	1,840,000	7	104	1875	
do do										3d ".....	1,840,000	7	104	1875	
do do										Optional.....	80,000	7	100	1868	
Illinois Central.....	Ills.	63	455	15,654,920	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Construction.....	12,885,400	7	100	1875	
do do										2d ".....	4,115,400	6	97	1875	
do do										Debtentures.....	427,400	7	96		
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,900	Jan. 1, 1860.	1st Mortgage.....	60,000				
do do										2d ".....	578,000	10			
do do										Income.....	38,700				
Indianapolis and Cincinnati.....	Ind.	110		1,639,900	1,362,284	140,689	448,855	230,834		1st Mortgage.....	500,000	7		1866	
do do										2d ".....	400,000	7	55		
do do										Real Estate Mortg.	200,000	7	85		
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	1st Mortgage.....	649,884				
do do										2d ".....	314,000				
Iowa Central Air Line.....	Iowa.	13		245,000	755,000		No report								
do do	Ohio.			118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Len. of R. d.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quint. of Bond.	Due.
Iron Mountain.....	Mo.	86 1/2		\$ 1,070,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st	2,000,000	7	75	1861
do										2d	392,000	7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,539	426,408	227,534		1st Mortgage.....	100,000	6		
do										1st	200,000	7		
do										2d " Conv.	1,000,000	7		
do										3d	600,000	7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	900,000		89	
do										2d " E. D.	1,000,000			
do										1st Land Grant W D	4,000,000		21	
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.	29		514,433	130,000		10,944	42,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1863
Little Miami.....	Ohio.	108					1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000			
Louisville and Frankfort.....	Ky.	65		1,169,59	394,519		245,910	99,679	June 30, 1861	1st Mortgage.....	218,000			
do										1st	2,000,000	7		
Louisville and Nashville.....	Ky.	268		5,631,460	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000			
do										1st " Memphis Br.	500,000			
Louisville, New Albany and Chicago..	Ind.	288		2,500,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,000	Dec. 31, 1860.	1st Mortgage	600,000	7		1861
Marion and Cincinnati.....	Ohio.	205		8,561,213	190,468	102,150	439,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868
do										2d	2,000,000	7		
do										3d	1,000,000	7		
do										Sterling Income..	333,000	4		
do										Domestic	928,617			
Michigan Central.....	Mich.	68 1/2	284	6,057,724	7,968,429	125,000	2,126,699	910,169	May 31, 1861	1st Mortg " Sterling	467,483	6	98 1/2	1872
do										1st " Conv.	500,000	8	84	1869
do										1st " unconv.	250,000	8	96	1860
do										1st " Dollar Conv.	2,500,000	8	106	1869
do										1st " S. F. Conv.	4,133,000	8	108 1/2	1882
Michigan South'n & North'n Indiana	Mich &	31 1/2	246	9,018,200	9,714,704	437,886	2,075,459	1,039,820	Mar. 31, 1861.	Mort. Mich. S.	991,000	99		1860
do										" Nor. Ind.	985,000	103		1861
do										" Goshen Line.	1,168,449	101		1863
do										S. F. Toledo	2,750,000	101		1885
do										2d Mortgage	2,465,000	89		1877
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,305	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d	200,000	7		
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8		
do										2d	600,000	8		
Milwaukee and Prairie du Chien.....	Wis.	34	192	4,944,000	2,556,000		683,126	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7		1891
Milwaukee and Western.....	Wis.	71		No report										
Mississippi and Missouri.....	Iowa,	55		No report						1st Mortgage Conv.	1,000,000	7	96	
do										2d " S. F.	400,000	8		
do										Oskaloosa Div.	1,425,000	7		
New Jersey.....	N. J.	31		4,397,208	688,000		992,767	579,981	Dec. 31, 1861.	Land Grant.....	7,000,000	7	102 1/2	
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	Mortgage.....	711,000			
New York and Erie Pref.....	N. Y.	64 1/2		Sold under mortgage			5,390,916	1,979,400	Sept. 30, 1860.	1st Mortgage.....	3,000,000		110	
do		38 1/2								2d	4,000,000		104	
do										3d	6,000,000		93	
do										4th	4,900,000		82 1/2	
do										5th	1,792,500		105 1/2	
New York and Harlem Pref.....	Conn.	40 1/2	138	5,717,190	6,055,752		1,142,251	433,716	Sept. 30, 1860.	1st Mortgage.....	2,950,000	7	101	1873
do		16								2d	1,000,000	7	101	1864
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7	94	Dec 1, 1866
do											978,000	6		
New York Central.....	N. Y.	93 1/2	556	24,000,000	14,613,005	none.	7,369,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H	7,925,000	6	101	Oct. 1, 1875
do										Mortgage.....	3,000,000	7	103	May 1, 1883
Northern Central.....	Md.	138		2,260,000	5,890,300	557,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,000,000	6		June 15, 1864
North Missouri.....	Mo.			2,423,736	4,350,000	93,795	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,500,000	6		1885
Ohio and Mississippi, Eastern Div.....	Ohio & Ind	102		Leased	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,194,500			
do										2d	316,945			
do										Construction.....	4,637,820			
do										Income.....	3,591,185			
Ohio and Mississippi, Western Div.....	Ills.	148			3,202,403		No report			State Loan.....	7,000,000			
Pacific.....	Mo.			3,199,662	7,100,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W.	2,800,000	6		
do										Construction.....	4,500,000	6	101 1/2	
Pennsylvania.....	Pa.	359		13,261,000	17,163,947	367,489	7,500,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv	4,900,000	6	98 1/2	1888
do										2d	2,319,600	6		1875
do										2d " Sterling.	1,957,440	6		1875
do										State Works.....	7,200,000	5	89	
Peru and Indianapolis.....	Ind.	74		1,100,000	800,000	80,000	No report			1st Mortgage	2,300,000	6	90 1/2	1884
Philadelphia, Wil. and Baltimore.....	Del.	98		5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863
do										1st Mort. O. & P ..	1,000,000	7	96	1865
Pittsburgh, Ft. Wayne & Chicago.....	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,102,155	1,757,273	2,335,313	761,555	June 30, 1861	2d	750,000	7	83	1866
do										1st " O. & I.	1,000,000	7		1872
do										2d	280,000	7		1873
Pittsburgh and Connellsville.....	Pa.	49		1,755,926	1,292,700	67,860	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n	500,000			
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.					
Sandusky, Dayton and Cincinnati ..	Ohio.	170		2,697,000	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1876
do										"	997,000	7		1866
do										"	1,000,000	7		1875
Sandusky, Mansfield and Newark.....	Ohio.	125		818,771	1,785,200	132,003	188,974	31,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886
Springfield and Valley.....	Ohio.	56		40,000	500,000	100,000	110,200	53,100						
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000			
do										2d	400,000			
Stevensville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d	900,000	7		1865
Terre Haute, Alton and St. Louis.....	Ills.	208		No report						1st Mortgage Conv.	1,000,000	7	110	1862
do										2d " Conv.	2,000,000	7	92	1864 & 1870
do										1st " Bel. & Ill.	517,000	7		1873
Terre Haute and Richmond.....	Ind.	100	73	1,341,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	2,000,000	7	92	1868
Toledo, Wabash and Western.....	Ohio & Ind	243		2,123,500	5,090,040	52,369	233,545			1st Mortgage.....	3,400,000	7	92	Aug. 1, 1865
do										2d	2,500,000	7	70	Nov. 1, 1878
do										Mort. Coupons....	98,049	7		1860 to 1865

other expenses of a railway. Its average cost per train mile already falls short of 3d. upon all the railways of the kingdom, and upon several important lines it falls below 2d., which is less than the fare of a single first class passenger. In other words, if one half of the whole sum now expended for fuel on the railways of Great Britain were saved, it would not increase the dividends on their cost by as much as one fifth of one per cent. But if, by saving one half of the fuel and possibly one half of the water now evaporated, lighter boilers could be employed, it is difficult to say where the saving would stop. We might have 3½ feet barrels with 130 tubes, 2 inches in diameter and 10½ feet long answering every purpose of the present 4 feet or 4 feet 3 inch barrels with 200 tubes, 2 inches in diameter and 12½ feet long. And with welded steel boilers, the greatest thickness of plate need not exceed 5-16 inch, if, indeed, ¼ inch, notwithstanding the high pressure carried.

With large cylinders, however, taking a very great pressure of steam upon equally large pistons, the latter with their rods, connections, crank pins, driving wheels, etc., would doubtless require to be heavy, and perhaps the saving of weight in the boiler would be to a great extent counterpoised by an increase of weight in other parts of the engine. In this case, however, and, indeed, in any case, diminution of weight should be sought in an increase of the speed of the piston, and in a consequent reduction in the size of the working parts for any given power. Thus, with the same pressure per square inch a 10 inch piston at 1,000 feet per minute gives off the same power as a 20 inch piston at 250 feet. In locomotives it has been sought to keep down the speed of the piston by enlarging the driving wheels, but with large wheels a correspondingly large capacity of cylinder, together with heavy connections, axles, wheels, framing etc., are requisite. A 14½ inch cylinder locomotive, with 20 inch stroke and 5 feet wheels, will at any given pressure of steam per square inch on the piston have the same tractive power as a 20 inch cylinder engine with 20 inch stroke and 10 feet wheel. But for any given speed in miles per hour, the piston of the former engine must move twice as fast as that of the latter; thus at sixty miles an hour the piston of the light engine would move 1,120 feet, while that of the latter would move at the rate of 560 feet in the same time. There is a practical advantage, well enough known to experienced engine drivers, in a quick reciprocation of piston, the action on the fire, or draught, being far easier and more effective than when larger volumes of steam are shot up the chimney at longer intervals. As for high speeds of piston, almost the only limit lies in good roads, and especially in correct counterweighting of the reciprocating and other disturbing parts, together with large wearing surfaces and ample provision for taking up wear in the journals and brasses. With 6 feet wheels, steel tyred and accurately counterweighted, and with compensating levers between coupled wheels, if any, we believe that sixty miles an hour may be made with greater ease and economy than with wheels of any greater diameter, and if any greater speed is to be attempted beyond that which now prevails it will, we are convinced, be accomplished by light and properly constructed small wheel locomotives. The mistake, heretofore, has been in making small wheel engines with small boilers, whereas, to realize their advantages, they should have boilers of the same capacity as those of large wheel engines exerting the same tractive power at any given

pressure of steam. Thus, with a given pressure of steam per square inch on the pistons, a 15 inch cylinder engine, with 24 inch stroke and 5 feet 6 inch wheels, would exert exactly the same tractive power (or "cylinder power" as some chose to call it) as the Great Western engines with 18 inch cylinders, 24 inch stroke, and 8 feet wheels. Hence, there being the same steam to provide in both cases, —supposing equal speed to be contemplated —the boilers of both engines should be of equal capacity. And there is nothing necessarily disproportionate in a 15 inch cylinder engine with a 4½ foot boiler and 1,800 square feet of tube surface. The small cylinder, small wheeled engine would still be much lighter than its bulky rival, although exerting the same actual power. We can not but believe that the time will come when many of our large driving wheels will be cut down by from one fourth to one third of their diameter, the cylinders being at the same time lined or bushed to reduce their diameter. With a proper use of all the opportunities which this change will afford, we shall find 25 ton engines doing the work now performed by 30 and 33 ton engines, and we shall doubtless wonder that we never hit upon so simple an expedient before. —*London Engineer.*

RAILWAY ACCIDENTS AND THE LAW.

At some of the railway meetings of the past fortnight the chairmen have taken the opportunity to complain of the awards granted to sufferers from accidents, and it is worthy of remark that on this question, as on most others, whenever the interests of the public are primarily concerned, the more narrow view propounded by the board the more unanimous is the approval of the shareholders. These points, therefore, must not be allowed to pass without exposure. Any alteration of the system which gives full compensation for every case of injury, so far as it can be measured by pecuniary calculation, would be similar in its effects to establishing a premium for mismanagement, while it would also be attended with incalculable inconvenience to every railway traveller in the kingdom. Looking at the liability to accident, no prudent person would voluntarily be a railway passenger without the certainty that some kind of provision existed to meet any expenses or loss he might sustain through being deprived temporarily or permanently of the power of gaining his living, or that might fall upon his family in case of his death. Under the existing law the railway companies are the assurers, and if this were not the case every individual traveler who might require to be protected—that is to say every sane person in the kingdom—would have to take an assurance ticket from some company established for the purpose—a proceeding which he must on all occasions keep in memory, and which to ladies and infirm and nervous persons would furnish anything but an additional incentive to this kind of locomotion. At the same time the consequence would also ensue that instead of the railway company, by whom alone control can be exercised to control accidents, the infliction would fall upon a corporate body wholly unconnected with them. Of course, the idea of chairmen and shareholders is if they could throw off their liability in these cases they might still charge the same fares, and that the difference therefore would be entire gain. Nothing could be more delusive. The public spend a certain amount on railroad traveling, and all the most astute contrivances to ex-

tract from them a larger sum would be self-defeating. If 3d. or 6d. or 1s. is to be paid on each journey for assurance, in addition to the regular fares, the result will be precisely the same as if the company raised the fares to that extent, and the problem of charging as exorbitantly as possible, without destroying traffic altogether, has already been tested to its extreme point. The extra tax, moreover, would be increased by the facts that the assurance company must make their own separate profit, and also that the liability to accidents would be greatly augmented the moment the pockets of directors and shareholders were exonerated. The real position of the case is that the public already pay to the railroad companies their full assurance premium. The companies are acquainted with the existing law and with this knowledge they make their calculations as to the fares at which they believe they can obtain the largest net receipts. If they find they have placed their fare too low to cover the liabilities to which as the law stands they are exposed, they can try the experiment of raising them. But in this process the worst managed would find they might be overpowered by the safer ones, who could afford to carry cheaper, and that would be very disagreeable. Hence the companies that are most notorious for want of punctuality, &c., are those who are most clamorous for a change. If they can not get rid of liability altogether, they would have it upon the limited principle. It is "absurd," they say, that the family of a man of large income, who pays the same fare as one of moderate resources, should receive a larger compensation in case of his death. They would like not to pay according to the pecuniary value of that which they have destroyed, but according to a scale which, unless there was a hecatomb of slaughter, would produce little inconvenience to them of any kind. While they complain of some cases being exceptionally heavy, they say nothing of those, like that of Dr. Baly, in which they escape entirely, although sisters and others may be permanently ruined. They forget also that, as their general fares are calculated so they may cover all requirements, every passenger virtually contributes to supply the means of full remuneration to all who may meet with accidents. Any jargon will pass with shareholders when it is put forth ostensibly to "protect their interests," and even people who would be shocked at any approach to irreligion are content to applaud the practical atheism involved in the theory most popular with railway chairmen, that the world is partly governed by chance, and that there is a large class of events which do not arise from any logical causes, and must, therefore, be treated as beyond control, and originating only in some inscrutable freak of malignant power. Happily, however, the shareholding public, although very extensive, and enjoying every seat in both Houses of Parliament, are not likely, even with all their unanimity, to prove stronger in the long run than the people at large, and it may, consequently, be hoped that juries will still, in the case of railway companies, enforce with unwavering rigidity the sound principle which pervades the law of England, that they must pay for such mischief as they create. The real interest of the railway companies are as much involved in its maintenance as are those of the public. Admitting even the directorial doctrine that order is not Heaven's first law, and that things are constantly happening that have no rational antecedent, and for which, consequently, no one can be held responsible, it is

still certain that, however inexplicable it may seem to these gentlemen, there is observable in every branch of occupation a uniform diminution of "unpreventable" accidents whenever the parties within whose sphere they are liable to occur are made to suffer for them, either in person or in pocket.—*London Times*.

ARTIFICIAL STONE.

"Quite a new impulse" must now be given "to the external decoration of buildings," according to Dr. Frankland, F.R.S., in consequence of a discovery made and patented by Mr. Frederick Ransome, of Ipswich, in connexion with his well-known artificial stone, produced from water-glass and lime, with clay. Heretofore this artificial stone, after its formation in a plastic state, required about one month to dry, and another to be kiln-burnt. Now, it seems, the plasticity is superseded by stony hardness, not only without either drying or kiln-burning, but also in an hour or two's time! The moulded or prepared stone requires simply to be dipped into a solution, and the work is done, even when the stone has been one weighing a whole ton weight or more. The solution consists of chloride of calcium; or, as it is more properly called when dissolved in water, muriate of lime. When the moulded matter is dipped into this solution it is very soon saturated with it, and a double decomposition takes place: the lime combines with the silica, forming a silicate of lime, which is one of the two chief cementing materials in all our cements, mortars, and concretes (carbonic acid being the other): the muriatic acid combines with the soda of the water glass, forming common salt, which is said to be "washed off." How this can be, however, we do not see clearly: it must pervade the whole substance of the new made stone; and might certainly be rapidly extracted by boiling water, or more slowly by cold water, or by rain *in situ*, leaving the stone more porous than before; but we do not mean to insinuate that hence the new-made stone can not be a permanent and really a stony product. Indeed, Dr. Frankland's experiments with it seem to show that it must at once possess remarkably weather-resisting powers. On this point he says, keeping in view the result of his experiments, "I should scarcely have imagined it possible that an artificial material could in so short a time, and without any application of heat, have attained such water resisting powers." It was found, however, as was to be expected, that the stone experimented on contained chloride of sodium; so that this salt had not been "washed off;" but it seems to be extractable without injury to the tenacity of the stone, although with an increase of porosity, as Dr. Frankland remarks. Of the general results of his experiments, Dr. Frankland says:—"Whilst they point out the Portland, Whitby, Hare Hill, and Park Springs, as the natural stones best adapted to withstand the influences of town atmospheres, they also indicate that Ransome's patent concrete will be found equal to the best of these in its power of resisting atmospheric degradation; and, if the newness of Ransome's stone (the specimen experimented upon not having been made a fortnight) be taken into consideration, together with the well known fact that its binding material, silicate of lime, becomes harder and more crystalline by age, I am induced to hope that Mr. Ransome has invented a material which, with the exception of the primary rocks, is better capable of giving permanency to external architectural decorations than any stone heretofore used."

MONETARY & COMMERCIAL.

The great feature of the past week is the advance in the premium on gold and silver, consequent upon the rise in the New York market. Gold is reported in New York on Wednesday at 35 premium; silver 28 and demand notes 30 premium, and Sterling Exchange up to 149, with upward prices of all foreign goods and domestic produce.

This produced considerable excitement among all classes of merchants, and it is now almost impossible to quote prices for anything from a package of pins to a barrel of flour. The transactions in money are quite limited, there being but few borrowers, and first class paper is in demand.

Exchange has advanced and is firm at quotations with a fair demand.

	BUYING.	SELLING.
New York	par	$\frac{3}{4}$ prem.
Boston	par	$\frac{3}{4}$ prem.
Philadelphia	par	$\frac{3}{4}$ prem.
Baltimore	par	$\frac{3}{4}$ prem.
Gold	33 prem.	33 prem.
Silver	21 prem.	27 prem.
Demand notes	24@25 prem.	.....

We give the following market quotations on Wednesday, from the transactions at the Merchant's Exchange, but they are liable to modification every hour:

Flour—The market was greatly excited to-day, under the news from New York, and prices are about 75c higher, closing at \$5.90 @6 for Superfine, \$6.10@6.15 for Extra, and \$6.25@6.50 for Family and Fancy. The market closed buoyant and unsettled.

Whisky—An active demand and prices higher. Sales of 500 bbls at 33c, and 400 do at 34c.

Provisions—An improved demand for Mess Pork, with sales of City at \$10.50, holders asking an advance at the close. Nothing transpired in Bacon or Bulk meats. No prime lard in the market; butchers' is wanted at 8 $\frac{1}{4}$ @9c in cooperage.

Oil—A sale of 15 bbls at 99 $\frac{1}{2}$ c.

Groceries—Sugar is held at $\frac{1}{4}$ @ $\frac{1}{2}$ c higher, and coffee 1@1 $\frac{1}{2}$ c; Molasses 60c. The market is unsettled under the news from New York.

Wheat—The demand continues active for all grades, and under the advices from New York and light receipts, prices advanced fully 5c per bushel, and owing to the rapid advance in flour, holders are contending for still higher prices. The sales reported were: 1,700 bushels prime Kentucky white at \$1.25; 800 do fair red at 1.07, and 3,000 do prime at \$1.10. The asking rates at the close were \$1.15@1.20 for red and \$1.30@1.35 for white, the latter rate for Kentucky, the supply of which is light.

Corn—The demand for shelled is less active, and prices are lower, closing steady at 37@38c, in bulk. There is a fair inquiry for ear from the retailers at 40c. The sales reported were: 5,000 bushels ear in bulk at 40c; 1,200 bushels ear and shelled at 38c;

600 do shelled at 37c, and 500 do do at 33c, in sacks, buyers furnishing sacks.

Oats—The demand is in excess of the supply, and prices are tending upward. The sales reported were: 5,000 bus old, in sacks, sewed, the buyer furnishing sacks, at 49c, to arrive; 1,000 do old, at 51c, in sacks, sacks returned; 1,000 do new, in sacks, sewed, at 51c, delivered, and 1,000 do old at 56c, in sacks, sewed and delivered, the buyers in both cases furnishing the sacks.

Rye—The demand continues good at 58c for prime samples on arrival. Holders at the close were generally asking 60c.

Barley—The offerings are light, and holders firm at full prices. The asking rates are \$1.20@1.25 for prime State Spring and Fall. A lot of 400 bus prime Chicago Spring sold at \$1.10.

The following important letter from Mr. Boutwell will be read with interest, as it affects many important transactions. It is unfortunate that the government could not get the machinery for starting the tax law ready for operation at the proper time:

OFFICE OF INTERNAL REVENUE
Oct. 1, 1862

Sir—Your letter of the 25th of Sept. has been received.

In reply to the inquiries therein contained, let me say to you that under the present circumstances, the stamp is not absolutely necessary until the 1st of Jan., 1863.

All instruments, therefore, made previous to that date, will be valid without stamp.

No prosecutions will be allowed till stamps are issued, as no one but collectors can inform against parties who neglect to use stamps.

Very respectfully,
(Signed) GEO. S. BOUTWELL,
Commissioner.

The operations of the New York money and stock market on Monday are shown by the following remarks by the Tribune;

The stock market rallied vigorously this morning from the depression of Saturday, and there was a large demand for the leading shares. The transactions were not equal in volume to those of the movement last week, but the feeling was cheerful and the impression general that the reaction had touched its lowest points on Saturday. The improvement ran through the entire list, was most marked in Erie, Illinois Cen. and the Mich. roads. There was great firmness on the part of holders, and the advancing bids brought out but moderate lots of stock. The market for Governments was not active but strong. Gold sold to the amount of \$300,000, from 129@129 $\frac{1}{2}$. Between the Boards the market was strong, with a further advance in some of the shares of 1@1 $\frac{1}{2}$.

The same buoyant feeling prevailed at and after the second Board, but later in the day there was a reaction of $\frac{1}{4}$ per cent. in some descriptions from the highest prices. Galena sold at 86—an advance of 3 per cent. from Saturday. Toledo at 71—an improvement of 3 per cent. Erie touched 58 $\frac{1}{2}$, closing at 58. Fort Wayne sold at 62. Michigan Southern

43½, against 41 on Saturday, &c. Gold went up to 130 and was strong at the close. The market had every appearance to-day of another vigorous speculation for the rise which will carry stocks to higher points than they have yet touched.

There was a better supply of money on call among the brokers to-day, and the flurry occasioned by the sudden calling in of loans seems to be over. There is but a meagre supply of paper in the street, and the negotiations are unimportant. Short dates go readily at 4 per cent., and the range for 4 to 6 months choice names is 4½ to 5½. The disturbance in Demand loans last week was probably the result of a little timidity on the part of the bankers, who became startled at the rapid advance in stocks, and the increasing balance of September. It had about as much effect upon the market as the sudden pouring of a few buckets of water upon a very large fire.

The deposits with Mr. Cisco, to day, for conversion in 5 to 20 per cents were \$110,000. The deposits of gold on 4 per cent. interest about \$50,000. The deposits for conversion would have been much larger, but for rumors that Government was making a negotiation for \$40,000,000 of its securities. We have authority for stating that nothing in regard to such a negotiation is known to the Sub Treasurer here, and Mr. Chase would scarcely take any important step without consultation with his principal financial adviser. That propositions have been made to Mr. Chase, looking to a negotiation of 1881's and 7.30's, we have been aware of for several days, but not to the extent named, and not upon terms acceptable to the treasury. It is possible that something may yet grow out of the present correspondence with Mr. Chase, but it has yet reached nothing but vague generalities.

Custom House notes have been very strong to day and touched 125½. The demand was large. Messrs. Livermore, Clews and Company alone bought and sold \$100,000. In gold the speculation appears to have recommenced, and with large transactions the quotation was 130½ at the close. The one year certificates are in active demand, and sold freely at 99½@100, the latter for those having a large amount of interest accumulated. The 7.30 Treasury Notes are firmer to-day and are 105½ at the close.

Philadelphia, Wilm'gton & Baltimore

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FOUR PASSENGER TRAINS DAILY!

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11, P. M., Express.
On Sundays at 3.30, A. M., and 11, P. M.
Leave Baltimore for the North and West daily, at 8.30, A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail; and 10.1, P. M., Express.
On Sundays at 7, P. M., only.

Through connections made for all points at the North, East and West.

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From recent surveys, completed Aug. 10, 1862; cost \$20,000 to engrave it and one year's time.
Superior to any \$10 map ever made by Colton or Mitchell, and sell at the low price of fifty cents; 376,000 names are engraved on this map.

It is not only a County Map, but it is also a **COUNTY AND RAILROAD MAP** of the United States and Canadas combined in one, giving **EVERY RAILROAD STATION** and distances between.

Guarantee any woman or man \$3 to \$5 per day, and will take back all maps that cannot be sold and refund the money.

Send for \$1 worth to try.
Printed instructions how to canvass well, furnished all our agents.

LYOYD'S TOPOGRAPHICAL MAP OF KENTUCKY, OHIO, INDIANA, and ILLINOIS.
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Wanted—Wholesale agents for our maps in every State, California, Canada, England, France and Cuba. A fortune may be made with a few hundred dollars capital. *No Competition.* J. T. LLOYD, No. 161 Broadway, New York.

The War Department uses our Map of Virginia, Maryland and Pennsylvania, cost \$100,000, on which is marked Antietam Creek, Sharpsburg, Maryland, Harts, Williamsport Ferry, Khorersville, Noland's Ford, and all others on the Potomac, and every other place in Maryland, Virginia and Pennsylvania, or money refunded.
Price 50 cents.

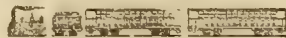
From the Tribune, Aug. 2.
"LYOYD'S MAP OF VIRGINIA, MARYLAND AND PENNSYLVANIA—This map is very large; its cost is but 25 cents, and it is the best which can be purchased."

LYOYD'S GREAT MAP OF THE MISSISSIPPI RIVER—From Actual Surveys by Capt. Bart and Wm. Bowen, Mississippi River Pilots, of St. Louis, Mo., shows every man's plantation and owner's name from St. Louis to the Gulf of Mexico—1,350 miles—every sand bar, island, town, landing, and all place 50 miles back from the river—correct in counties and States. Price, \$1 in sheets, \$3 pocket form, and \$2.50 on linen with rollers. Ready, Sept. 20.

NAVY DEPARTMENT, Washington, Sept. 17, 1862.
J. T. LLOYD—Sir: Send me your Map of the Mississippi River, with price per hundred copies. Rear-Admiral Charles S. Davis commanding the Mississippi squadron is authorized to purchase as many as are required for use of that squadron.

GIDEON WELLES, Secretary of the Navy.

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANA POLIS AND CINCINNATI SHORT-LINE



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SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis at which place it unites with Railroads for and from all points in the West and North-west.

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THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:00 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:00 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M. Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—6:30 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains' or line, and run through to Chicago without change of cars.

Be sure you are in the **RIGHT TICKET OFFICE** before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

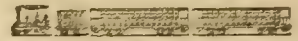
Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

Cincinnati and Chicago Air-Line



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Through Distance 280 Miles;

42 Miles Shorter than any other Route.

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M. 7:40 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway, corner Vine and 3d, under Burnet House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M. and run directly through to Chicago without stopping or transshipment.

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CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

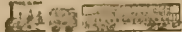
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To Hammered or Rolled Axles

In the best Manner, at the Shortest Notice,

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This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition
The well-earned reputation of this Road for
SPEED, SECURITY AND COMFORT
Will be more than sustained under the reorganization of its business.

In addition to the Unequaled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio River and Harper's Ferry, with painful and instructive interest.

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At the Ohio River with Cleveland and Pittsburgh Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester Road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY on route—being \$1.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

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THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Best in Passengers and their Baggage transferred Free in New York.

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feb 6. CHARLES MINOT, Gen'l Sup't

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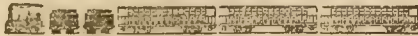
Railroad Cars of Every Description.

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Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that they will be speedily and to the satisfaction of all.

1862. 1862. Pennsylvania Central R.R. 235 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE AND WASHINGTON.

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (130 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.

BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

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J. E. MOORE, Louisville, Ky.

W. W. ALKMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.

CLARKE & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

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HALL & CO., Marietta, Ohio.

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J. P. JOHNSON, Ripley, Ohio.

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Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York [via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Allentown, Pa.

L. L. HOUSTON, Gen'l Ticket Agent, Philadelphia.

H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:00 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton. RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:10 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:10 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day, Toledo & Dayton, Huntsville.....	5:20 P. M.	1:10 A. M.
Cin & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	6:00 A. M.	11:10 P. M.
Indianapolis and Terre Haute.....	6:00 A. M.	1:15 P. M.
Decatur, Springfield & Quincy.....	11:30 A. M.	3:40 P. M.
Chicago Night Express.....	6:30 P. M.	16:00 A. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	5:00 A. M.	10:05 P. M.
Seymour Accommodation.....	2:00 P. M.	1:15 A. M.
Louisville and St. Louis Night Ex.....	5:00 P. M.	5:50 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: Southeast corner of Broadway and Front; North-west corner Third and Vine (Barnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

P. W. STRADER.
General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads.

W. H. L. NOBLE.
General Ticket Agent Indianapolis & Cincinnati Railroad.

F. F. FULLER.
General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLAND STREET

NEW YORK.

ALBERT BRIDGES.

JOSE

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES
Tube CLEANERS, Steel Wire and Whalebone BRUSH-

Artesian Oil and Salt WELL TUBING.
Lap Welded Steel BOILER TUBES.
Glass Enamelled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warm-
ing Horticultural Buildings.
Ventilating for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Piaz-
za Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.
Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,
28 Platt Street, New York

N. W. BALDWIN, MACHEW BAIRD. M. W. BALDWIN & CO. ENGINEER'S

BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of
LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for ahesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned
THEODORE DRON,
no 1 10 Wal Broadway, New York

EDWIN J. HORNER,

SUCCESSOR TO

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LOCOMOTIVE & RAILROAD
CAR SPRING
MANUFACTURER,
WILMINGTON, : DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

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Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE ON BOTH SIDES, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

If Send or call for a circular, containing all particulars, prices, testimonials, etc.
Feb 12. WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

-AND-

Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Spt. 2. MOSELEY & CO.

JAMES FOSTER, Jr. & Co.,
MATHEMATICAL AND PHILOSOPHICAL INSTRUMENT MAKERS,

S.W. CORNER FIFTH AND RACE,

Cincinnati Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

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Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
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FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works
June 9.

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

-AND ALSO TO-

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, President.
WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

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MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1½ to 10 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from ½ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—½ to 24 inches diameter, and branches for same. &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS, CHAS WHEELER,
THOS. T. TASKER, JR., S. F. M. TASKER,
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EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce-

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroad office for the South and West. For sale by 1,000 leading Stationers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON.

Editors

CINCINNATI:
THURSDAY, OCTOBER 23, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$5 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion.....	\$1 00
" " per month.....	3 00
" " six months.....	12 00
" " per annum.....	20 00
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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.00 P. M.	8.00 A. M.

Cincinnati, Hamilton & Dayton—

Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.00 P. M.	6.45 P. M.

Dayton, Lima, Toledo & Hunt-

ville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.30 A. M.
Eastern Night Express.....	10.00 P. M.	8.10 A. M.
		5.40 A. M.

Sandusky, Dayton & Cincinnati—

Morning Express.....	6.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.10 A. M.

Marietta & Cincinnati—

Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.50 P. M.	10.00 A. M.

Ohio & Mississippi—

Mail.....	5.00 A. M.	10.05 P. M.
Symour Accommodation.....	2.00 P. M.	1.15 P. M.
Express.....	5.00 P. M.	5.53 A. M.

Indianapolis & Cincinnati—

Mail.....	6.00 A. M.	11.10 A. M.
Chicago Express.....	6.20 P. M.	10.00 A. M.

Dayton & Michigan—

Toledo, Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.

Cincinnati & Chicago Air Line—

Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.00 P. M.	10.10 A. M.

Cincinnati, Wilmington and Zanesville—

Morning Express.....	10.00 A. M.	4.20 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.

Kentucky Central— (City Time.)

First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

OUR FOREIGN COMMERCE SPECULATION.

The condition of our foreign commerce is presenting some very strange anomalies at the present time, and which may lead to very serious commercial disasters if nothing intervenes to prevent them. The causes that have produced this state of affairs are various, though we fancy that the main ones may be found in a plethora of money in New York, and an ardent desire on the part of speculators for a sudden acquisition of fortune. That there are no good reasons for the extraordinary rate of gold and foreign exchange in New York, few who are conversant with the facts, will deny. A distrust in the government, excited and fostered by the designing, may have led many timid persons to make investments in coin for the purpose of hoarding; but that any considerable amount of the precious metals have been drawn from the avenues of trade for that purpose does not appear probable, certainly not enough has been taken in that way to warrant the extraordinary rates of gold in all our markets. Gold is not wanted for the ordinary purposes of trade for while the government securities are a legal tender at par, nobody will trouble themselves to pay their debts in gold, nor will they buy goods with that commodity unless they can do so at profit. Neither do the requirements of our foreign commerce indicate any such rates for gold as are now current. Let us look at this matter a little.

The imports into the port of New York for the first nine months of 1861 were one hundred millions of dollars. For the same period in 1862 they were one hundred and thirty-seven millions. In 1860 they reached one hundred and eighty-four millions. From this it will be seen that the imports for the first nine months of this year are thirty-seven millions greater this year at New York, our principal port than they were last year; but forty-seven millions less than in 1860.

To meet these imports we sent out in the first three quarters of 1860 seventy millions of domestic produce, in 1861 we sent ninety-seven millions, and in 1862, one hundred and seven millions of dollars worth. We also sent out in the same period of 1860, thirty-nine millions in specie, in 1861 three millions, and 1862 forty-three millions, in all eighty-five millions of specie, which added to the exports of produce gives two hundred and seventy-four millions, leaving one hundred and forty-seven millions to be paid by the exports of cotton and other produce from southern ports in 1860 and 1861, a figure vastly below the real amount shipped during those years.

From this it will be seen that there is nothing to alarm us in the figures of our foreign trade; but much to encourage, especially when we reflect that the shipments of the present year are almost exclusively the products of the northern free states. The only

item in this showing, that looks at all unsatisfactory, is the large export of specie this year as compared with the last. But last year was an unusual one, and the export of this year is only four millions in excess of 1860, which is nothing comparatively.

But we have another fact that has not yet been brought into the account, and that is, that in the same months last year there was imported into New York from foreign ports thirty-five millions of specie, and this year nineteen millions from California. These two items alone, to say nothing of supplies from other sources, will fully cover the whole shipments of specie for the past two years—leaving as much in the country to-day as we had this time in 1860, when exchange was at or below par, and gold was no better than bank notes. Why then all this excitement about gold and foreign exchange—which, of course, takes its rate from the price of gold. The answer is obvious. It is nothing but speculation on the part of certain bankers and stock jobbers, who, when the Government resumed its just right to furnish the circulating medium of the country, felt that their opportunity longer to swindle the people with bogus bank bills was for ever gone, unless they could by some means discredit the government issues. There was but one way to do that, as Congress had very wisely made them a legal tender for all purposes save the interest on national loans and the payment of duties. Advancing the price of gold was the only alternative, and forthwith Wall Street set itself to work to perpetuate its ancient reputation of controlling the financial affairs of the country. So far it has gone ahead swimmingly; but the chances are that the day is not very far distant when it will find itself beaten at its own game. This war, when it ends, will end suddenly. And the end may be much nearer than many suppose. Within six months after it ends not less than *four hundred millions* of specie will seek our shores to pay for the cotton which Europe must have, and for which she can offer nothing else but gold. Then let those who are trying to overthrow the credit of this government beware, or they will be buried so deep that they will never see day light again.

On this subject the New York Commercial very truly remarks:

The speculations which are now rampant are speculations against the credit of the national paper. They are further encouraged by banks and bankers, patriotic and otherwise, thoughtless, perhaps, of the disastrous consequences which impend in the future, or if they are considered, it is only as something to be thought of hereafter, when the fever of speculation has had its run, and prudent people expect to be prepared for the crash which they know is inevitable, but think it far distant. Alas, that in these days, when thousands are sacrificing their lives to sustain the national flag, few seem to be found willing to forego profits only to be made by sacrificing the national credit.

NATIONAL GEN'L TICKET AGENTS' ASSOCIATION.

MEETING HELD AT CLEVELAND, OCT. 15, 1862.

Meeting called to order at 11 A. M. Committee on credentials report the following names as delegates:

J. W. Cary, C. P. & A., Cleveland; J. M. Hall, T. & W., Toledo; J. B. Ralston, St. L. A. & T. H., St. Louis; W. P. Johnson, Ill. Central, Chicago; Geo. M. Wheeler, G. & C. U., Chicago; E. P. Bacon, M. & P. Du Chien, Milwaukee; Lewis L. Houpt, Pennsylvania Philadelphia; Wm. P. Shinn, P. Ft. W. & C., Pittsburgh; F. R. Myers, C. & P., Cleveland; W. L. St. John, C. & R. I. and M. & M., Chicago; D. B. Howard, St. L. A. & C., Chicago; Jas. Ferrier, Jeffersonville, Jeffersonville; J. A. Perkins, I. C. & D. W., Indianapolis; J. M. Kerper, L. & Indianapolis, Lafayette; C. H. Kendrick, Hudson River, New York; E. F. Fuller, O. & M., Cincinnati; H. C. Marshall, C. C. & C., Cleveland; J. U. Parsons, C. & T., Cleveland; Sam'l Powell, C. P. & Q., Chicago; Chas. F. Follet, C. & Chicago, Chicago; J. M. Kimball, L. & M., Milwaukee; H. T. Frary, R. W. & O., Watertown; C. P. Leland, M. S. & N. I., Toledo; E. DeWitt Robinson, C. & N. W., Chicago; E. F. Folger, N. Y. C., Albany; C. B. Greenough, Erie Railway, New York; J. A. Burch, B. & E., Buffalo; T. D. Barton, Gt. W. (Canada), Buffalo; H. F. Clark, L. P. & B., Peoria; Ira A. Hutchinson C. O. & C. C. & P., Columbus.

The reading of proceedings of previous meetings was omitted by vote of Convention.

J. W. CARY chairman of business Committee, makes verbal report, That they have no business to present to the meeting.

On motion of Mr. Houpt,

Resolved, That the business Committee have leave to set again, and make written report before the Convention adjourn.

On motion,

Resolved, That the revision of Passenger Rates be made the first business this afternoon.

On motion, the following resolution was adopted:

WHEREAS, at the Convention held in March, 1862, it was,

"Resolved, That Railroad Companies who are now using Coupon Tickets on the principle of Consecutive Numbers report all sales by numbers; and that all General Ticket Agents are requested to adopt this system."

And WHEREAS, it appears that but few Companies have adopted this form of reporting, therefore—

Resolved, That for the information of the members of this Convention, each General Ticket Agent will report to the Secretary of this Convention:

1st. Whether or not his coupon tickets are consecutively numbered.

2d. Whether or not he is reporting by number, in accordance with the resolution above quoted.

The following answers were given by the Roads represented:

NAMES.	Coupons.	Report by Cons.	Nos.	Numbers.
Cleveland, Painesville & Ashtabula R. R.	do	Yes	.....	No
Toledo & Wabash	do	.....	No	.....
St. Louis, Alton & Terre Haute	do	.....	Yes	.....
Illinois Central	do	.....	Partly	.....
Galena & Chicago Union	do	.....	Partly	.....
Milwaukee & Prairie du Chien	do	.....	Yes	.....
Penn. Central	do	.....	Yes	.....
Pittsburgh, Fort Wayne & Chicago	do	.....	Yes	.....
Cleveland & Pittsburgh	do	.....	Yes	.....
Chicago & Rock Island	do	.....	No	.....
St. Louis, Alton & Chicago	do	.....	Yes	.....
Jeffersonville	do	.....	Yes	.....
Indiana Central & Dayton & West'n	do	.....	No	.....
Lafayette & Indianapolis	do	.....	No	.....
Hudson River	do	.....	Partly	.....
Ohio & Mississippi	do	.....	No	.....
Cleveland, Columbus & Cincinnati	do	.....	Yes	.....
Cleveland & Toledo	do	.....	Yes	.....
Chicago, Burlington & Quincy	do	.....	Yes	.....
Cincinnati & Chicago	do	.....	No	.....
La Crosse & Milwaukee	do	.....	No	.....
Rome & Watertown	do	.....	Partly	.....
Mich. Southern & Northern Indiana	do	.....	Yes	.....
Chicago & North Western	do	.....	No	.....
New York Central	do	.....	Yes	.....
Erie Railway	do	.....	Yes	.....
Buffalo & Erie	do	.....	No	.....
Great Western, (Canada)	do	.....	No	.....
Logansport, Peoria & Burlington	do	.....	No	.....

It was here explained by W. P. SHINN, that those companies having tickets on hand without consecutive numbers could have them numbered in a paging machine at a cost of *one cent per hundred coupons, or one dollar per thousand, for tickets of ten coupons each*, and in proportion for those of less coupons. It is therefore apparent that the expense of numbering tickets need not, and should not, stand in the way of a uniform system of reporting by numbers. He also called the attention of the convention to the fact that the year is omitted from the dating stamps used by many Ticket Agents, and in view of the large number of tickets coming in after the current year has expired, recommended a reform in this particular.

On motion, adjourned till 2.30 P. M.

Convention met pursuant to adjournment.

The following resolution was presented by Mr. SHINN, and by vote of Convention, was lost:

Resolved, That on and after the 1st of January, 1863, the several Companies represented in this Association will decline to receive for passage any tickets not bearing date of the month and year in which they are issued, either stamped or written thereon; and that the Secretary be requested to send a copy of this resolution by itself to each Company or Agency issuing coupon tickets.

On motion, Convention adjourned and went into Committee of the whole, on rates. The President and Secretary of Convention acting same for Committee. 5 P. M.—Committee adjourned till 9 A. M. Thursday morning.

THURSDAY, 16th.—Committee met pursuant to adjournment.

6 P. M.—Committee on rates make their report, which was adopted.

On motion, the following resolution was adopted:

Resolved, That the column of Baltimore rates be suspended for the present, and that the rates from and to Baltimore and all points west of Pittsburgh be made fifty cents less

than the rates in the Philadelphia column; to take effect on November 1st proximo, and to continue in operation until the Baltimore & Ohio Road becomes again the short line from Baltimore to the west; and that a note be so appended to the published tariff.

On motion the following resolution was adopted:

Resolved, That the resolution relative to Emigrant rates, adopted at the Convention, held in March, 1862, having been found to be inoperative, be and the same is hereby repealed.

On motion, the following resolution was adopted:

Resolved, That all rates designed to be changed to take effect from and after November 1st, which have not already been furnished to this Association, shall be promptly made up and forwarded by circular or letter, to all Lines interested, before the 25th inst., otherwise they shall not be considered binding, nor put in force until December 1st, 1862:

On motion, the following resolution was adopted:

Resolved, That the rates adopted by this Convention take effect November 1st, 1862, except to points on the upper Mississippi River, which rate shall go into effect on closing of navigation on the river.

Committee on the revision of old resolutions and rules of Association reported as follows:

The Committee to revise the old resolutions and rules adopted by this Association would respectfully report that the papers not being in proper shape for such revision, they ask for further time.

J. W. CARY,
F. R. MYERS,
WM. P. SHINN,
C. B. GREENOUGH,
JNO. U. PARSONS.

On motion, the following resolution was adopted:

Resolved, That a Committee of three be appointed to consider the propriety of employing a suitable person to prepare a full and complete book of proportions of the rates adopted by this association, the expense to be apportioned to and paid by the members of the Association, pro rata per mile on the Roads they represent; said Committee to report at the next regular meeting, with an estimate of the probable expense.

E. F. FOLGER,
L. L. HOUP, } Committee.
F. R. MYERS.

On motion, the following resolution was adopted:

Resolved, That Clyde and Monroeville be stricken from the list of published rates.

On motion, the following resolution was adopted:

Resolved, That the next regular meeting of this Association be held at Chicago, on Wednesday, April 15th, 1863, at 10 o'clock

A. M., at such place as may be designated in the call of the Secretary; and that the members of this association, resident in Chicago, be a Committee to arrange for the place of holding such meeting, and report the same to the Secretary one month in advance of the time of meeting.

The business Committee for the next meeting are:

C. E. FOLLETT,
E. DEWITT ROBINSON,
W. P. JOHNSON,
SAM'L POWELL,
W. L. ST. JOHN.

On motion, the following resolution was adopted:

Resolved, That each member of this Association confer with the member of Congress from his District, as to having the time extended, in which Railroads are to make their report to the Government officer of their earnings.

On motion, adjourned to meet in Chicago.

J. M. KIMBALL, *President*.

H. C. MARSHALL, *Secretary*.

SPECIAL CONVENTION.

GENERAL TICKET AGENTS.

HELD AT CLEVELAND, AUGUST 12TH, 1862.

Convention called to order 11.30 A. M. Agreeable to the Rules of Business, Messrs. MYERS, GREENOUGH and PARSONS were appointed a Committee on reception of delegates, and report the following names:

J. M. Hall, Toledo & Wabash; J. U. Parsons, Gen'l Ticket Ag't, Cleveland & Toledo; Chas. Wood, Secretary, T. H. & Richmond; E. F. Folger, Chief Clerk, N. Y. Central; H. C. Marshall, Gen'l Ticket Ag't, Clev., Col. & Cin.; L. L. Houpt, Gen'l Ticket Ag't, Pennsylvania R. R.; Sam'l Powell, Gen'l Ticket Ag't, Chi., Burl. & Quincy; W. L. St. John, Gen'l Ticket Ag't, C. & R. I. and M. & M.; C. B. Greenough, Gen'l Ticket Ag't, Erie Railway; J. M. Kimball, Gen'l Ticket Ag't, La Crosse & Mil.; W. L. Doyle, Gen'l Ticket Ag't, B. & N. Y. & E.; C. P. Leland, Gen'l Ticket Ag't, M. S. & N. I.; L. R. Kimball, G. W. R. R. Ill., 1861; F. R. Myers, Gen'l Ticket Ag't, Cleve. & Pitts.; G. M. Wheeler, G. & C. Union; J. A. Burch, Gen'l Ticket Ag't, Buffalo & Erie; M. G. Clapp, Gen'l Ticket Ag't, S. D. & Cincinnati; Julius Movius, Gen'l Ticket Ag't, D. & M. & G. & W.; Jas. M. Concannon, Gen'l Ticket Ag't, North Missouri R. R.; Wm. C. Owen, Gen'l Ticket Ag't, Quincy & Toledo; P. W. Strader, Gen'l Ticket Ag't, L. M. & C. & X. & C. H. & D.; E. F. Fuller, Gen'l Ticket Ag't, Ohio & Mississippi; E. D. W. Robinson, Gen'l Ticket Ag't, Chi. & North-West'n; J. W. Cary, Gen'l Ticket Ag't, C. P. & Ashtabula; Wm. P. Johnson, Ill. Central R. R.; J. B. Ralston, St. Louis, Alton & T.H. Wm. P. Shinn,

Gen'l Ticket Ag't, Pitts., Ft. Wayne & Chic.; P. B. Groat, Gen'l Ticket Ag't, Hannibal & St. Joseph.

On motion, the reading of the proceedings of last meeting were omitted.

On motion of L. L. Houpt, the Convention agree to proceed immediately to the consideration of Passenger fares.

Julius Movius offered the following resolution:

Resolved, That three per cent. being the amount of Government tax, it be added to the passenger rates now in operation, as adopted at the last Convention of General Ticket Agents, held in New York on the 19th of March last.

Laid on the table.

L. L. Houpt offered the following resolution:

Resolved, That each delegate be requested to state what instructions he has received to govern his action in this Convention, as his name may be called by the Secretary.

Adopted.

The following Roads do not increase their rates:

Terre Haute & Richmond, LaCrosse & Milwaukee, Michigan Southern & Northern Indiana, and Cleveland, Painesville and Ashtabula.

On motion, resolution No. 1 was taken from the table:

L. L. Houpt offered the following substitute for resolution No. 1, which was adopted:

Resolved, That we now proceed to increase the through rates in accordance with the views of this Convention, to suit the various roads represented.

On motion, the following resolution was adopted:

Whereas, The National Tax Law of 1862 makes it obligatory upon every Railroad Company to render a certified return of its gross receipts within five days after the end of each month, under a penalty of an additional 5 per cent. on the amount of such earnings, if the return be delayed beyond 10th day of each month; and

Whereas, In order to make these certified returns at all possible, great and invariable promptness is necessary on the part of each Company, in the interchange of their monthly reports; therefore,

Resolved, That it shall be the duty of each General Ticket Agent in connection with this body, to see to it that the reports from his road over the various roads in connection with him, be made before the fifth day of each month.

On motion,

Resolved, That the fare between Baltimore and Cincinnati be fixed at \$16.85, and that roads selling tickets be required to conform to this rate.

Adopted.

E. D. W. Robinson offered the following resolution, which was lost:

That owing to the very arbitrary position taken by certain roads, in refusing positively to advance their rates of passenger fare, to meet the Government tax, and against the expressed wish and desire of a large majority of the roads represented;

Resolved, That as no rates can be adopted unanimously by this meeting, this Convention do now adjourn, and such roads as can advance their rates, having the privilege of notifying by circular such advance as they choose to make.

Adjourned to 9 A. M.

WEDNESDAY, August 13th, 9.30 A. M.

Convention met at Angier House. After reading minutes, on motion of H. C. Marshall, the Convention resolved itself into committee of the whole on passenger rates.

On motion, L. L. Houpt's resolution about fares between Baltimore and Cincinnati was adopted in committee of the whole.

THURSDAY, August 14th, 8 P. M.

The committee having reported the passenger rates, on motion they were declared adopted to take effect Sept. 1, 1862.

On motion, the following resolution was adopted:

Resolved That the Secretary append a note to tariff of rates as adopted, requesting any road requiring any corrections or changes, to report them to the business committee prior to the next meeting.

On motion, the following resolution was adopted:

Resolved, That the thanks of this Association be extended to Mr. Taylor, Proprietor of the Angier House, for the many courtesies received during the sessions of this Convention.

On motion, Convention adjourned.

THE COTTON SUPPLY.

[In consequence of several egregious errors made by our compositors, entirely destroying the sense of our leading article in last week's issue, relative to the "Cotton Supply," we deem it proper to republish it, corrected, so as to redeem the article from positive nonsense.]

Manufacturers in all parts of the world are beginning to be sorely puzzled about the future supply of cotton. Hitherto the old stock was sufficient for the requirements of trade, a market for manufactured goods being more in demand than cotton; and spinners could afford to talk about cotton supply without action. Now they must act, whether they talk or not, as the stock of manufactured goods, after a year's drain, is beginning to run low. There is still, however, sufficient of the old stock on hand to supply the demand for many months to come, and, perhaps, until the cotton of the South is liberated, which may be much sooner than is dreamed, by the people at large. When the war broke out the markets of the world were largely overstocked with manufactured goods, and the owners thereof have been largely benefited in consequence, by

finding a sale for their wares at greatly enhanced prices. The want of English cotton spinners, therefore, was not at first so much the want of cotton, as market for their goods. The markets they are now finding, and consequently they will soon want the former to keep their laboring millions from starvation.

The English manufacturer has long wished to be independent of this country for his supply of cotton, and has sunk large sums of money in India in railways, &c., in order to accomplish the wish of his heart; but hitherto, his success has not been great. The reason is, perhaps, that he has not gone the right way to work. In a barbarous or semi-barbarous, or even in a half civilized country, agriculture or manufactures can not flourish without organized labor. In other words a system of labor, akin to American slavery, is the only one that can obtain from an uneducated and unenlightened people that continuity and regularity of action that is necessary to produce great results in agriculture. Had the English set to work, not to enslave the East Indians, but to organize among that people a judicious and carefully arranged system of labor, by which every person over twelve years of age would have been made to earn something more than his or her daily bread, as among the slaves of the South, they would now be quite independent in their cotton supply. As it now stands but little in advance of former supplies of that precious commodity is likely to be received from that country.

The Chamber of Commerce of Manchester lately held a meeting upon this subject, at which Samuel Laing, Esq., late a member of the Queen's Indian Council, presented his views on the question. His testimony, however, could not be considered very encouraging to the hopes of those who look to India as the chief future supply for cotton. Mr. Laing said:—

"By this time it was pretty clear both what India could and could not do. It could not furnish a substitute for the 4,000,000 of bales of American cotton which had been suddenly withdrawn from the commerce of the world. Nor would it be reasonable to expect that India could do this when it is remembered that it took from five to six acres to produce a bale of clean cotton, at the rate of from 60 lb to 80 lb per acre. Even if all the railways were completed, and even if the Indian cotton grower had a guarantee as to price, it was quite out of the question that such an enormous transfer of labor and capital could be made from agriculture and other pursuits as to give an additional cultivation of something like 20,000,000, or even 10,000,000 of acres in the course of a year or two."

These views are certainly very sound, and it seems strange that any one could be found who could expect that so large an operation as the production of four million bales of cotton could be transferred from one country to another in the space of a year or two, or even a quarter of a century.

But there are other objections in the way

besides the magnitude of the work, which Mr. Laing thus explains:

"It was quite clear that in India there was a great extent of country where cotton of every quality, especially Egyptian, could be grown, always provided that the price was sufficient to warrant the diversion of the land from other tropical produce. But it was questionable whether cotton would ever maintain a sufficiently high price after the present scarcity was at an end. He had some doubts on that point himself, and also as to cotton being largely cultivated on an extensive scale by European planters. In India, cotton was more on a level with ordinary agricultural produce, such as rice or linseed. The cultivation of tea, for instance, and other products might be made more profitable by the ordinary planter; but where cotton was grown and would be grown in India was more on the small farms of the ryots than by European planters on a large scale. The ryot possessed his own bullocks and plough, his own labor; he did the hoeing himself; his wife and children were there to do the picking, and the consequence was that he could produce cotton at an exceedingly low price."

The true secret, however, after all, is perhaps the unprofitableness of the production of cotton in a country so far away from the point of its manufacture. Had England turned her attention to Nicaragua, Grenada, or other Central American States, she would have been much more successful in obtaining a supply that would have interfered greatly with the Southern States. The writer of this, in a conversation with a very intelligent Mississippi cotton planter a year or so ago, was assured by him, and he was well informed on the subject by a long residence in the tropics, that with organized labor, he could raise in any one of the Central American States cotton enough to supply the world at rates far below the cost in Mississippi and Arkansas. The cotton plant there is perennial and blooms the year round, and produces in the greatest abundance, and with little labor, cotton equal to the average of our Southern States. The principal labor is gathering, ginning and transporting to market. Why this country has not attracted more of the attention of the seekers of the cotton supply, is a mystery that we can not fathom. But should the President's project of Negro colonization be carried out, we may in future hear much more of that country and its cotton growing qualities than at present. Walker and his Confederate pirates were well aware of the capacities of that region for the production of cotton, hence their great desire for its conquest, and the introduction of African Slavery. It will be safe therefore, we think, to conclude, that if our own Southern States are ever seriously interfered with in growing cotton, it will be by the States of Central America.

As to substitutes we have no idea that any will ever be found. The fiber of cotton possesses qualities that no other fiber yet found possesses, and we do not see how it can be superseded for spinning purposes. But we shall

reserve what we have to say on this subject to another article with the simple remark that if all signs do not fail, *the cotton now in the Southern States will be in market before the middle of the coming winter.*

THE RAILROAD TIME-TABLE.—The Convention of Railroad Managers to fix a time-table for winter, running between New York and the West, met at the St. Nicholas Hotel, New York, on Thursday, Mr. E. C. Chapin, of the Western Railroad of Massachusetts, in the chair, and Messrs L. D. Buckner, of the Cleveland and Toledo, and E. P. Phillips, of the Boston and Worcester Railroad, acting as secretaries. The following roads were represented: Erie, Hudson River, New York Central, Pennsylvania Central, Western of Massachusetts, Boston and Worcester, Steubenville, Great Western of Canada, Lake Shore, Cleveland and Toledo, Cleveland, Columbus and Cincinnati, Little Miami, Michigan Central, Chicago, Burlington and Quincy, Bellefontaine, and Detroit and Milwaukee. The Convention, after transacting some minor business, resolved to adopt the following time-table, to take effect November 17th:

GOING EAST.		
Leave St. Louis.....	4:00 P. M.	6:30 A. M.
" Cincinnati.....	5:30 P. M.	10:30 P. M.
" Cleveland.....	7:30 P. M.	10:00 A. M.
" Buffalo.....	3:40 A. M.	6:15 P. M.
Arrive New York.....	8:30 P. M.	12:00 noon.
GOING WEST.		
Leave New York.....	7:00 A. M.	5:00 P. M.
" Buffalo.....	11:00 P. M.	11:00 A. M.
Arrive Cleveland.....	7:35 A. M.	7:15 P. M.
" Chicago.....	10:35 P. M.	10:00 A. M.
" Cincinnati.....	6:50 P. M.	7:00 A. M.
" St. Louis.....	10:30 A. M.	10:30 P. M.

The starting time for the Eastern bound trains for Chicago was not definitely settled, but connection will be made with both through trains at Cleveland.

HARTFORD AND NEW HAVEN RAILROAD.

Twenty-seventh annual report of the Board of Directors to the stockholders of the Hartford and New Haven Railroad Co.

The income of the road for the year ending August 31st, 1862, is as follows:

From passengers.....	\$412,452 08
freight.....	292,590 51
rents, mails and expresses.....	42,452 08
Total.....	\$747,300 00
The expenses for repairs of track & equipment, and all other current and incidental charges for working the road, are.....	357,001 92
Balance of interest acct.....	52,910 92
Total.....	\$409,912 84
Deducting exp's and int. from the gross earnings, the balance of net receipts is.....	\$337,387 06

For a more detailed statement of the receipts and outlays of the company for the year, reference is made to the report of the Secretary, which is hereunto annexed.

The no. of passengers carried on the road during the yr..	511,451
including soloiers, is.....	190,270
The total no. of tons of freight transported is.....	256,694
The no. of miles run by passenger trains is.....	2,388
" freight ".....	2,388
" other ".....	2,388

Total miles run..... 347,360

The gross income of the road exceeds that

of the last year in the sum of \$34,432.87. Of this increase, \$30,427 06 or nearly the entire amount was derived from the freight traffic. The receipts from passengers and freight show a diminution of \$13,236, as compared with the income of the year 1860. The increase in the number of passengers is 11,563. This additional number over the last year was composed entirely of military, and does not show the same relative increase in the receipts of the road, owing to the diminished rates they have been charged by the Co.

The number of miles run shows an excess of 23,869. Although the increase of mileage is large, the actual expenditure for fuel is about the same as the last year. This result is chiefly attributable to the more general use of coal in the locomotives, and the saving in this respect will be still greater in future, by the gradual substitution of coal for wood as fuel.

The operating of the road has been conducted with entire exemption from serious accident of any kind.

No expense has been withheld to maintain the track and equipment in good working condition, and in each of those departments all deteriorations are made good as fast as practicable, and the cost charged into the current expenses.

Reference has been made in former reports to the prospect of constructing an iron bridge over the Connecticut river, on the line of the company's road. Some measures have been taken during the past year for the accomplishment of this most important object. The masonry for the additional piers required to support an iron superstructure, has been contracted for, and that part of the work is progressing. The piers are to be of granite, and thus uniformity will be preserved with those now supporting the present bridge. Owing to the unsettled state of the iron market, and the great demand made by Government upon the iron establishments of the country, it has not yet been found practicable to make any satisfactory arrangements for the iron work of the bridge. It is to be hoped that a more favorable state of affairs in this respect will soon take place, and that this portion of the work may also be commenced. The cost of the proposed bridge and masonry can not be less than \$200,000, and will not probably be greatly in excess of that sum. The expenditure will be fully justified, in placing the business of the company beyond the risk of interruption, or of subjecting the public travel to the greatest inconvenience—a risk to which it will be more or less exposed so long as the present wooden structure remains.

The results of the year's business are very satisfactory, and in view of the greatly disturbed state of public affairs, they afford gratifying evidence of the resources of the road, and of its ability to command a large business under circumstances which must be regarded as of the most unfavorable character.

By recent acts of Congress, and also of the Legislature of the State of Conn., the amount of taxes required to be paid by railroad companies has been very largely increased. The tax imposed by this State is three-fourths of one per cent. upon the market value of the stock, and on this basis the assessment to be paid by this company to the State will amount to nearly \$25,000.

In addition to this, a tax is levied by Congress of three per cent. upon the gross income from passengers; together with a tax of three per cent upon the amount of all dividends declared. These several items will amount in the aggregate to a sum nearly or quite equal to *two per centum upon the capital stock of the company*. While the stockholders of this company will cheerfully bear their full share of such burdens as the public necessities may demand, it can hardly be considered equitable that the road should be made to bear exclusively this increased amount of taxation. Time, therefore, may develop the expediency of making some changes in the tariff of passengers and freights. Some roads have already advanced their charges to meet these new calls upon their income, Congress having made provision expressly for this purpose; but it is not contemplated by this Board to make any changes in this respect until the necessity for such course is apparent. It is, however, competent for the stockholders to take such action on the subject as they may consider that their interests require.

The suit which has been so long pending against the New York and New Haven Company approaches to a conclusion. The evidence has been taken, and the argument was assigned for the 17th day of September, before the Honorable B. F. Boney, the referee appointed by the Superior Court of New York.

In pursuance of a decree of the Supreme Court of this State, the restrictions against this company running their trains to the steamboat dock at New Haven have been removed. A daily connected line by railroad and steamboat to and from New York has been established, and is now in successful operation. With this exception, all the trains of the road run in connection with the trains of the New York and New Haven Road, as heretofore; but the independent position which this company now occupies in its relations to other roads is not, in any aspect of the case to be regretted.

A dividend of 4 per cent has been declared, making 11½ per cent for the current year, the company also assuming to pay the Government tax of 3 per cent on the dividend declared. All of which is respectfully submitted on behalf of the board.

C. F. POND, Pres't.

Hartford, Conn. Sept. 16, 1862.

THE ERIE RAILROAD.

THE WIDE GAUGE.

The New York and Erie Railroad Company was incorporated by the Legislature of New York on the 24th April, 1832, with authority to construct "a railroad from the city of New York, or some point near, to Lake Erie." Piermont, 24 miles above Duane street, New York city, was made the initial point of the great iron-portal-way between the Hudson river and Lake Erie. On the 23d September, 1841, the first portion of the road was opened from Piermont to Goshen, a distance of 46 miles. In 1842 the corporation was surrendered to assignees. In 1845 the Legislature of New York passed an act under which the Company's finances were readjusted, the State agreeing to waive its claim for \$3,000,000 invested by it in the work, provided the road were opened to Lake Erie within six years from the date of the relief Act of 14th May 1845. This stipulation was conformed to, and in May, 1851, the road was opened to Dunkirk, 446 miles from Piermont, and 460 miles from New York city.

The Company paid dividends for seven consecutive years commencing with 1848, when they had 74 miles of road in operation, and ceasing with 1854, having had in use since May, 1851, their whole main trunk, 446 miles. In 1857 a dividend of ten per cent. was paid in stock. On the 16th August, 1859, the road was put into the possession of a Receiver, who operated it to the 31st December, 1861, when it was conveyed to a new corporation named *The Erie Railway Company*, made up of all the parties in interest in the insolvent corporation which it succeeded.

Financially and commercially, the history of the Erie Railroad Company discloses a series of vicissitudes and fluctuations, all which, however, are now seemingly surmounted in the visible success of the road in its last official year, and in the current year to date. Moreover, the future of the Erie road is bright with promise; for the Atlantic and Great Western Railroad, already an important *Erie feeder*, is also a progressing reality to and in the State of Ohio. And in the same proportion that the past history of the Atlantic and Great Western Railroad develops a masterly foresight and strategy, in striking contrast with the unaccountable indifference of those having the custody of narrow gauge interests in northwestern Pennsylvania, will the Erie railroad *hereafter profit* under similar relative management, at least until *Erie city wakes up to a realization of what she has lost by the wide gauge invasion of her back country*, though the obliquity of the Philadelphia and Erie Railroad direction, subsequent to the purchase and sale of the State Canals. Even though the Atlantic and Great Western Railroad may not pay big dividends out of net earnings, nevertheless, it will be a drawback and hindrance to the prosperity of Erie city, a formidable rival of the Philadelphia and Erie Railroad where the latter should have been absolute, and a thorn in the side of *all* the narrow gauge through lines. In a word, the Atlantic and Great Western Railroad will work mischief in Pennsylvania and Ohio, the consequences whereof will tend to the sole profit of the Erie Railroad and its owners.

The occupation of the Valley of Oil Creek by a wide gauge branch of the Atlantic and Great Western Railroad has diverted the well oil trade to the Erie Road, and has enhanced Atlantic and Great Western Railroad loans

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital Paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	64	48	\$ 13,111,800	\$ 10,781,833	\$ 566,070	\$ 3,922,203	\$ 2,303,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5	95	1835	
Baltimore and Ohio.....	Md.									"	2,500,000	6	84	1850	
do do										"	700,000	6	84	1850	
do do										"	1,124,500	6	90	1875	
do do										"	1,000,000	6	90	1867	
do Washington Branch.....	Md.	30	30	1,650,000						"	791,000	7	55	1865	
ellefontaine and Indiana.....	Ohio & Ind.	118	118	1,859,813	1,250,750	139,120	314,090	8,795	Dec. 1860.	1st Mortgage.....	160,000	7		1870	
do do										2d "					
Buffalo and State Line.....	N.Y. & Pa.	135	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75	75	1,101,432	1,428,000		104,860	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	138	96	3,798,400	8,800,000		1,997,165	733,950	Dec. 31, 1860.	1st Mortgage.....	450,000	6	100	1864	
Central Ohio.....	Ohio.	137	137	In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	800,000	7	80	1864	
do do										2d "	601,000	7	64	1865	
do do										3d "	950,000	7		1865	
do do										4th " S. F.	1,367,000	7		1876	
Central of New Jersey.....	N. J.	64	64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,410,000	7	100	1865 & 1870	
do do										2d "	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	222	222	In hands of Receiver.	6,168,520	730,000	994,560	225,787	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7			
do do										2d "	1,535,000	7			
do do										3d "	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d "	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	104	104	2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	1st Mort. S. F. Gen'l 1st Mortgage.....	1,250,000	7	101	Feb & Aug.	
do do										2d "	3,600,000	7	69	Feb. & Aug.	
do do										3d "	2,400,000	6	26	May 1.	
Chicago and Rock Island.....	Ills.	81	175	5,803,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	105	1870	
Chicago, Burlington and Quincy.....	"	105	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	6	110	1863	
do do										2d " S. F.	813,000	8	108	1890	
do do										1st Mort. Chi. & Aur.	390,000			1867	
do do										2d "	303,130			1869	
do do										1st Cent. Mil. Tract	392,000			1864	
do do										2d "	245,000			1863	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
Cincinnati, Hamilton and Dayton.....	Ohio.	105	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	950,000	7	100	1860	
Cincinnati Wilmington & Zanesville ..	Ohio.	132	132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
do do										Income.....	365,500				
Cleveland and Mahoning	Ohio.	68	68	1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d "	490,000	7			
do do										3d "	341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	38	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1860	
do do										2d " M. L. or 1st Ex.	1,788,000	7	96	1873	
do do										3d 2d Ex.	1,165,000	7	81	1865	
do do										4th 3d Ex.	1,134,000	7	70		
Cleveland and Toledo.....	Ohio.	69	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mort. Jun. 1st Div.	350,000	7	104	1867	
do do										1st " " 2d Div.	263,000	7		1872	
do do										2d " " "	260,000	7		1862	
do do										1st " Tol. Nor. & Clev	521,000	7		1863	
do do										2d " " "	293,300	7		1864	
do do										Income.....	44,500			1862	
do do										C. & T. Income.....	300,000	7		1864	
Cleveland, Columbus and Cincinnati.	Ohio.	135	135	4,746,100	519,000	4,201	1,255,003	664,898	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	135	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	106	1861	
do do										2d "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	115	54	1,490,000	290,700	50,500	See L. Miami.			Dividend.....	272,700		100	1860 to 1866	
Columbus, Piqua and Indiana.....	"	103	103	In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142	142	2,176,666						2d "	2,212,000	8			
Dayton and Western.....	Ohio.	38	38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	50		
Detroit and Milwaukee.....	Mich.	186	186	No report						2d "	2,500,000	7	90	1875	
do do										3d "	1,000,000	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111	111	No report											
Dubuque, Marion and Western.....	Ohio.	36	36	469,762	788,853	152,694	132,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Eaton and Hamilton.....	Ind.	132	132	986,061	1,219,100	249,685	124,140			2d "	400,000				
Evansville and Crawfordsville.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	18,000				
Fox River Valley.....										2d "	18,000				
Galena and Chicago Union.....	Ills.	84	121	6,028,300	3,524,200	none	1,402,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000		104	1862 & 1863	
do do										2d "	1,520,000		100	May 1, 1875	
Great Western	Ills.	175	175	1,000,000	2,391,000		425,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										2d " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	84	84	400,000	No report					1st Mortgage.....	5,000,000		26		
Greenville and Miami.....	Ohio.	32	32	300,000	473,000	75,000	63,141	13,573		Mortgage Conv.	1,354,000		45		
Hannibal and St. Joseph.....	Mo.	206	206	1,041,026	10,554,000	220,336	996,907	512,933	Sept. 1, 1860.	1st Mortgage.....	927,000	6	30	1873	
do do										2d "	4,000,000	7	100	1869 & 1870	
Hartford and New Haven.....	Conn.	67	62	2,350,000	927,000	13,356	712,876	354,135	Aug. 31, 1861	1st Mortgage.....	2,000,000	7	105	1870	
Hudson River.....	N. Y.	144	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	2d S. F.	1,840,000	7	104	1875	
do do										3d "	1,840,000	7	104	1875	
Illinois Central.....	Ills.	81	455	15,654,920	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000	7	105	1868	
do do										Construction.....	12,885,400	7	100	1875	
do do										"	4,115,000	6	97	1875	
Indiana Central.....	Ind.	72	72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	Debentures.....	42,740				
do do										1st Mortgage.....	600,000	7			
do do										2d "	578,000	10			
Indianapolis and Cincinnati.....	Ind.	110	110	1,689,900	1,362,284	140,689	448,858	230,834		Income.....	38,700	10			
do do										1st Mortgage.....	500,000			1866	
do do										2d "	400,000		90		
Indianapolis Pittsburgh and Cleveland	Ohio.	84	84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mortg.	200,000				
do do										1st Mortgage.....	649,984				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d "	314,000				
Iron.....	Ohio.	13	13	118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st ".....	2,900,000	7	75	1861
do										2d ".....	392,000	7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st ".....	250,000	7		
do										2d " Conv.....	1,000,000	7		
do										3d ".....	600,000	7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.....	903,000			
do										2d " E. D.....	1,000,000		89	
do										1st Land Grant W D.....	4,000,000		21	
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.	69		514,433	130,000		103,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1863
Little Miami.....	Ohio.	23					1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000	6		
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		245,910	98,679	June 30, 1861	1st Mortgage.....	2,000,000	7		
do										1st ".....	400,000			
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.....	400,000			
do										1st " Memphis Br.....	500,000			
Louisville, New Albany and Chicago..	Ind.	258		2,800,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861
Marietta and Cincinnati.....	Ohio.	208		8,561,213	190,468	108,150	439,649	78,800	Aug. 1, 1861	1st Mortgage Conv.....	2,500,000	7		1868
do										2d ".....	2,000,000	7		
do										3d ".....	1,500,000	7		
do										Sterling Income.....	333,000	4		
Michigan Central.....	Mich.	87½	284	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	Domestic.....	928,617	6	94½	1872
do										1st Mortg' Sterling.....	467,483	6	84	1869
do										1st " Conv.....	500,000	8	96	1800
do										1st " unconv.....	250,000	8	106	1869
do										1st " Dollar Conv.....	2,598,000	8	108	1862
do										1st " S. F. Conv.....	4,153,000	8	108	1860
Michigan South'n & North'n Indiana	Mich &	41½	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. So.....	991,000	103	108	1861
do										" Nor. Ind.....	985,000	100	103	1868
do										" Goshen Line.....	1,168,000	101	100	1865
do										S. F. Toledo.....	2,750,000	97½	101	1877
do										2d Mortgage.....	2,465,000	8		
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d ".....	300,000	8		
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8		
do										2d ".....	600,000	7		
Milwaukee and Prairie du Chien.....	Wis.	36	192	4,944,000	2,356,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	102	1801
Milwaukee and Western.....	Wis.	71		No report										
Mississippi and Missouri.....	Iowa,	35		No report						1st Mortgage Conv.....	1,000,000	7	96	
do										2d " S. F.....	400,000	8		
do										Oskaloosa Div.....	1,425,000	8		
New Jersey.....	N. J.	34		4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Land Grant.....	7,000,000	7	109	
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	Mortgage.....	711,000	7		
New York and Erie Pref.....	N. Y.	89		Sold under mortgage			5,590,916	1,979,402	Sept. 30, 1860.	1st Mortgage.....	3,000,000	105		
do		59½								2d ".....	4,000,000	110		
do										3d ".....	6,000,000	117		
do										4th ".....	4,900,000	100½		
do										5th ".....	1,792,500	82½		
New York and Harlem Pref.....	Conn.	50	138	5,717,190	6,055,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	103	1873
do		2½								2d ".....	1,000,000	7	105	1864
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	6	94	Dec. 1, 1866
do										".....	974,000	6	109	Oct. 1, 1875
New York Central.....	N. Y.	106½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.....	7,925,000	7	109	May 1, 1883
do										Mortgage.....	3,000,000	6		June 15, 1864
Northern Central.....	Md.	138		2,260,000	5,890,300	537,926	1,018,102	283,627	Dec. 31, 1860.	Construction.....	2,006,500	6		1885
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6		
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6		
do										3d ".....	316,995			
do										Construction.....	4,637,920			
do										Income.....	3,591,185			
Ohio and Mississippi, Western Div....	Ills.	148			3,292,403		No report			State Loan.....	7,000,000	6		
Pacific.....	Mo.			3,190,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" " S. W.....	2,800,000	6		
do										Construction.....	4,500,000	6		
Pennsylvania.....	Pa.	359		13,361,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.....	4,900,000	6	104½	1888
do										2d ".....	2,319,000	6	98½	1875
do										2d " Sterling.....	1,957,410	6	89	1875
do										State Works.....	7,200,000	5		
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report			1st Mortgage.....	2,300,000	6	90½	1884
Philadelphia, Wm. and Baltimore.....	Del.	98		5,600,000	2,310,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	7	104½	1865
do										1st Mort. O. & P.....	1,000,000	7	94½	1866
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	467		Sold for Floating Debt.	10,192,155	1,737,273	2,335,353	761,555	June 30, 1861	1st " O. & I.....	1,000,000	7		1872
do										2d ".....	360,000	7		1873
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.....	500,000			
Racine and Mississippi.....	Wis.	164		2,705,720	1,417,900	1,065,328	220,850	68,438	May 10, 1861.					
do														
Sandusky, Dayton and Cincinnati ..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856
do										".....	997,000	7		1866
do										".....	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886
Seato and Hookens Valley.....	Ohio.	56		401,975	500,000	100,000	110,200	53,100						
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000	7		
do										2d ".....	450,000	7		
Steuensville and Indiana ..	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d ".....	900,000	7		1865
do										1st Mortgage Conv.....	1,000,000	7	89	1862
do										2d " Conv.....	2,000,000	7	80½	1868 & 1870
do										1st " Bel. & Ill.....	517,000	7		1866
Terre Haute and Richmond.....	Ind.	105	73	1,281,450	230,000	none.	377,602	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	106	1866
do		31	243	2,123,506	5,990,049	52,389	233,546			1st Mortgage.....	3,400,000	7	99	Aug. 1, 1865
do		71								2d ".....	2,500,000	7	80	Nov. 1, 1878
do										Mort. Coupons.....	94,049	7		1860 to 1865

several per cent. in the London money market; the fact that the wide gauge interest was the first to occupy the well oil region, and that the Oil Creek Railroad is an adjunct and feeder of the Atlantic and Great Western Railroad, has given to that road an importance and consideration among English capitalists which otherwise it could not have attained, and per consequence, Atlantic and Great Western Railroad bonds are in favor among foreign bankers and investors. And having the inside track in northwestern Pennsylvania as against the narrow gauge interests in that region at this present time, we shall next witness a concentration of effort for the extension of the wide gauge into central and southern Ohio; for John Bull is a rare paymaster after once his credulity is compassed, and his co-operation is enlisted in a joint stock undertaking far away from his own native Isle.

Therefore, it is plain to us that, so long as the credit of Atlantic and Great Western Railroad bonds can be sustained in the London money market, just so long will the wide gauge make progress West and Southwest, until finally on the ground, as at present on the paper plan, Jersey City and St. Louis will constitute the termini of an unbroken wide gauge route. And as the Erie road is the butt end of this Hudson Mississippi line, it is to be presumed that her efforts will be devoted to its speedy construction.

The subjoined statement exhibits the earnings of the Erie Road for the eleven years, ending respectively, September 30, during which it has been in operation through to Dunkirk:

October.....	\$772,362	\$585,597	\$173,794
November.....	734,806	554,562	499,446
December.....	708,136	404,276	409,431
January.....	695,616	404,507	336,390
February.....	613,049	391,932	369,279
March.....	636,615	458,510	466,370
April.....	605,751	547,174	463,215
May.....	575,344	506,610	413,991
June.....	518,000	430,062	401,560
July.....	587,009	382,705	370,255
August.....	609,890	419,009	477,883
September.....	750,090	515,947	598,341
Total.....	\$7,746,582	\$5,590,916	\$5,180,321
1858-59.....			\$4,482,149
1857-58.....			5,151,616
1856-57.....			5,742,696
1855-56.....			6,349,050
1854-55.....			5,448,993
1853-54.....			5,359,958
1852-53.....			4,318,962
1851-52.....			3,537,266

It will be seen that for the year ending September 30, 1862, the road earned \$1,397,532 more than in its next highest year, 1856, when its earnings reached \$6,349,050.—*U. S. R. R. and Mining Register.*

ERIE R. R.—Some important changes are reported in the Division Superintendents of the Erie Railway, to take place on the first of next month. F. B. Sweetzer, at present Superintendent of the Eastern Division, has been appointed Superintendent of the Atlantic and Great Western Railway, and is to be succeeded by Mr. C. L. Robinson of Dunkirk, at present Superintendent of the Western Division. Mr. H. C. Brooks succeeds Mr. Robinson as Superintendent of the Western Division, and also retains his position as Master Mechanic of the Dunkirk and the Buffalo Division.

—The tonnage of the Reading Road for the last week was 59,330, and of the year 1,819,444 tons, against 1,330,976 last year.

ON RECLAIMING LAND FROM SEAS AND ESTUARIES.

BY MR. J. H. MULLER, OF THE HAGUE.

The author stated, that he understood works of this class to comprise an area either of salt marsh, samphire ground, slake, mud, or sand, lying more or less above the level of low water and being reclaimed from the sea by means of embankments, and drained by natural means through the sea banks. Reclaiming land was frequently looked upon as a hazardous speculation, owing to the probable contingencies where water had to be dealt with, and to the benefits being generally prospective. It was often condemned on account of the state of the ground, which was pronounced to be unsuitable for the purpose. But the question should not be determined in that way, for the value of the ground before being reclaimed was no measure of the merit of the proposal, which could only be decided by comparing the cost of the necessary works with the improved value that would be given to the land when that operation had been accomplished.

After contending that the effect of reclaiming or draining land was to remove the cause of malaria or ague, and not, as has been erroneously asserted, to produce it, the author proceeded to point out, that in designing such works, the object should be to enclose the largest area with least length of bank, and the smallest average cross section. These points were regulated by the direction of the sea bank, to which attention was next called. It was sometimes recommended that the sea bank should be as nearly as possible parallel with the current, and at an angle to the prevailing winds; but experience seemed to show that, where creeks did not interfere, a different system was preferable; and that one side should be boldly exposed to the full force of the gales, and that the current should be allowed to act upon it almost at right angles, if, at the same time, that one side would shelter or protect the two other sides. By this arrangement a less extent of bank required supervision during gales, and it also presented advantages during construction. The line of the embankment should, if practicable, cross creeks at right angles, and at the same level; and in all cases, care must be taken to secure the bottoms of the creeks by aprons, to prevent them from becoming deeper.

The extent of land to be reclaimed at any one time was then considered, and it was argued that large areas were the least expensive in the end; for if a small area was selected at first, some portion of the original sea banks would be useless, when an increase became desirable. If the banks could not be constructed entirely on the salt marsh, it was preferable to go half-tide level. The difficulty in the construction did not increase with the size of the area reclaimed, but depended upon the openings left in the banks. As instances:—In reclaiming a piece of land 1,000 acres, by a bank three-quarters of a mile in length, the seat of which was 6 feet below the level of high water, only one opening, 7 chains in width, was left. In another case, in reclaiming 1,700 acres, by a bank four miles in length, the seat of which was 8 feet below high water, three openings, of 5, 7, and 12 chains in width, were left. In neither case was the speed of the outgoing current materially increased during the progress of the works, nor indeed until the cross section of the opening was dismissed. In completing

the latter work, the aprons were raised 18 inches, or two feet at a time, by wood work, stone, and clay. It was expected that the current would increase in the third opening, when the two others were raised: but this did not occur, as the water within the enclosure did not reach so high a level as that without; in fact, it never attained to high-water mark. When the aprons were above the level of the re-claimed land, the current on leaving became violent. This could not, however, be avoided, in finally closing a bank.

Between the old sea bank and the edge of low water, the soil might be divided into four distinct classes,—the salt marsh, of clay, about the level of summer spring tides; then samphire ground, slake or mud, or rich alluvial matter, to half tide; next, hard sea sand; and lastly, near low-water mark, quicksand. Banks entirely on the salt marsh were the easiest and the strongest that could be made; those on samphire ground and mud were the most difficult. Slips were of constant occurrence, the use of wagons and horses was impossible, and a large proportion of the material was washed away as it was deposited, before the bank was consolidated, and raised above high-water mark. In fact, for waste, settling, and contingencies, from 60 to 100 per cent. of the original quantity must be calculated upon as necessary. If a storm arose, during the progress of the works, the slopes could not be protected; and indeed a bank constructed on such a bottom was always unsafe. When the line of the embankment was laid at the half-tide level, or about the limit of vegetation, and on hard sand, it was possible to make the whole of the reclaimed land fit for cultivation, and this plan need not cost more, and was safer, than by adopting the higher, but softer bottom. Banks on a lower level were not advisable.

Having stated the conditions to be observed in the direction and situation of the banks, the next question requiring attention was the cross section. This naturally divided itself into two parts,—the main body to resist the dead weight of the water when at rest, and mode of protecting the slopes, to enable it to resist the action of the water when in motion. With regard to the first point, the best cross section was that where the centre of gravity came nearest to the bottom, and to the top of the bank. For this reason, steep slopes with a cress or bench, about the level of high water, were preferable to flat slopes without a cress or bench. Sand standing at its natural slope was sufficient to resist still water.

Breaches in banks were attributable either to a percolation of water underneath the seat, or to the defence or protection of the slope being insufficient. Frequently it was not possible to obtain clay in sufficient quantities to form a puddle wall in the center of the bank; and if the force of the wave was strong enough to break through stone and wood, clay would not be able to resist it. Sometimes, at extraordinary high tide, a breach would occur above the cress, but this rarely happened, and the time during which danger could arise was so short, that the evil might be remedied before the next returning high tide. When the water rose above the top of the bank, the back unprotected slope was liable to be damaged, and thus to lead to a breach. This might be averted by driving stakes into the top of the bank, and placing planks, supported by clay or other materials, behind them.

With respect to the protection of the slope, there was a difficulty in ascertaining correctly the force of the sea water when violently agi-

tated. Mr. Storm Buysing had stated, in his work on hydraulic engineering, that the shock of the water and of floating objects against slopes, increased in the same ratio as the sine of the angle formed by the slope with the horizon. De la Coudraye and Brémontier contended, in their theory of the motion of the waves, that the water only moved vertically up and down, without any horizontal displacement. It was well known, that the sea had the power to destroy banks, and to displace stones of considerable weight; and the engineer must be guided by experience, in dealing with these matters, rather than by speculative opinions.

The materials employed for the defence of slopes were of three different kinds,—clay and grass flags, wood, and stone. When banks were constructed on salt marshes, the body consisted of clay taken from the adjoining excavations. In this case it was advisable, after trimming the slopes, to sow coarse and meadow grass and clover seeds, and to protect the whole with a crammat. This crammat, which cost threepence or fourpence per square yard, was composed of a layer of clean barley straw, about 2 inches thick, evenly laid, and fastened to the clay by straw bands or strands: 60 to 90 stitches being made per superficial yard. In two or three years the bank was so consolidated, that the mat did not require renewal. When these banks were on a lower level than the salt marsh, a protection of clay and grass was insufficient. In such cases, a layer of clay, protected by stone, at a slope of 4 or 6 to 1, was employed in England, but without a cess or bench. This afforded the requisite strength, but it was expensive, and, as usually constructed, it needed much repair. The author thought that, when the bank was constructed on samphire ground, as within a comparatively short period a new salt marsh or fore-shore would be formed, it would be sufficient to protect the slope of the bank with wood, and that the slopes above the cess need not be protected, nor be flatter than 3 to 1.

A description was then given of the protection by fascine work. This consisted of layers of fagots, 5 or 6 inches in thickness, placed in a direction up and down the slope of the bank, the thick ends overlapping the thin ends of the lower rows. These were fastened down by stakes, which were left 8 inches above the fagots, and were connected together by means of willow binders, or "wattles," something like hurdle work. When the proper sort of wood was obtained, this protection would endure from five to seven years, and was quite able to resist the action of the tide. The strength of this kind of protection might be increased, by increasing the number of stakes and binders, or by filling in with stone, firmly wedged between the rows of stakes. The stone defence, as commonly constructed by the Dutch, on islands exposed to the ocean, was formed thus:—When the slope was trimmed, a layer of clay, 12 inches to 18 inches in thickness, was spread over it, covered sometimes with a crammat. Over this, bricks in one or two courses were laid, and then from 6 ins. to 12 ins. of brickbats, on which stones from 12 inches to 18 inches in depth were set. This work, though very durable, was costly, and hence should only be adopted where security rendered it necessary: as, for instance, for banks near to low-water mark. Details were then given of four different cross sections, and it was observed that, with a stone defence, the slopes were recommended to be flatter, and the banks to be higher, than where wood protection was em-

ployed; for it was expected that the former would be built in more exposed situations. In some cases it had been found advantageous to introduce rows of oak stakes, at intervals above the surface of the stone, to break the force of the waves.

In the construction of sea walls or banks, the most difficult operation was that connected with the crossing of creeks, before alluded to, especially when the bottom was 10 feet, 20 feet, or more under low-water mark. In England, the usual plan was to fill in large quantities of material from the sides; but this was a costly method. In Holland, on the contrary, the custom was to raise the bottom uniformly to the level of low water by means of cradles. The cradle was formed of brush-wood, bound together by ropes and osiers, and was usually from 2 feet to 3 feet thick. It should be made on a flat sand, or silty ground, about 3 feet below high water, of the full length of the opening, and of proportionate width; being perfectly flexible, it adapted itself to the inequalities of the ground. It was stated, that particular attention must be paid to the stakes or fastenings by which it was held down, as the safety of the cradle depended entirely upon them. After being so secured, it was weighted with clay, brickbats, and stones. The mode of constructing a cradle, of floating it to its place, and of sinking it in the centre line of the intended embankment, were then minutely described. The sides of the opening were next protected with similar cradles, the lower end of each resting on that first laid. Subsequently, other cradles were sunk over these, until the work reached low-water mark, when the width of the embankment was gradually increased by throwing in sods on the flood side, protected by fascine work, weighted with stone. The same process was then pursued on the ebb side. When the surface of the creek was level with, or above, low water, cradles were not required. In such cases, the ground was covered with a thin layer of clay, protected by an apron of fascine work.

In conclusion, the mode of constructing the banks themselves, by side cuttings at least 20 feet from the foot of the slopes, was described; and it was urged, that each part undertaken should be raised to its full height in one tide, the exposed side being covered with a thin layer of clay. In the next tide, this should be provisionally protected by a crammat, and before the ensuing spring tide the work should be finally protected with stone or wood.

OUR CHIEF CITIES.—The eighth census of the United States shows that the ten chief cities of the country rank in the following order:

Cities.	Population, 1860.	Inc. pr. ct.
1. New York.....	805,651	5.47
2. Philadelphia.....	562,529	65.43
3. Brooklyn.....	266,661	175.37
4. Baltimore.....	212,418	25.65
5. Boston.....	177,812	29.90
6. New Orleans.....	168,675	44.91
7. Cincinnati.....	161,444	39.51
8. St. Louis.....	160,773	106.49
9. Chicago.....	109,260	264.65
10. Newark, N. J.....	71,914	64.89

—The Norwich and Worcester Road earned in September an increase in round numbers of \$10,000 over September, 1861. The recent purchases have been largely for Norwich account by parties best acquainted with the worth of the stock.

MONETARY & COMMERCIAL.

The speculation in gold and silver continues to be the great feature of interest in the monetary world. The New York bankers and brokers having run it up to unprecedented prices, have suddenly changed tactics. Gold is excluded from the list of the brokers' Board, and the bankers refuse to make loans on deposits of it. The result is a material decline in the premium. The buying rates have gone down as low as 23 but are now quoted at 24 to 25. Various excuses have been framed by way of apology for this extraordinary speculation. Foreign balances, heavy imports &c., &c., have all been assumed to be the leading cause, while the main fact connected with the gold supply that we have actually received from California and other sources more bullion than we have exported is a standing refutation of any such apologies.

The demand for money has been greater this week than for any previous week of the season. The market is however well supplied and No. 1 paper is easily negotiated at 8 to 10 per cent. There is as usual extreme difficulty in negotiating anything but first class paper.

Eastern exchange remains as at previous quotations. The demand has not been very extensive. It is quoted at $\frac{1}{2}$ dis. to par buying and $\frac{1}{2}$ premium selling. It is not now as formerly affected by the rise in gold. Our national currency has at least done this good service to the country, it has equalized its commercial transactions and rendered exchange a very simple matter. The following are the quotations:

	Buying.	Selling.
New York.....	$\frac{1}{2}$ dis. to par.	$\frac{1}{2}$ prem.
Philadelphia.....	$\frac{1}{2}$ " " par.	$\frac{1}{2}$ prem.
Boston.....	$\frac{1}{2}$ " " par.	$\frac{1}{2}$ prem.
Gold.....	24 to 25 prem.	24 to 30.
Silver.....	18 to 20 prem.	25 prem.
Demand Notes.....	20 to 22 prem.	

The produce market has been quite unsettled during the week. The high prices obtained at our last dates have declined and are again nearer the actual demand. Speculators alarmed at the decline in gold have withdrawn from the market. We quote flour superfine, at \$5.00 to \$5.25 per barrel. Wheat, red is \$1.00 to \$1.02, white, \$1.10 to \$1.15. The demand for Corn is good and prices are sustained. Shelled sells at 37 to 38 cts., and ear 40 to 41 cts. Oats are in demand at 50 cts. for new and 55 cts. for old. Rye 61 cts. Barley scarce at \$1.25 to \$1.30. Whiskey 34 cts, dull.

—The Cleveland and Toledo receipts for September are very satisfactory, and are \$1,000 in excess of the estimate. The Cleveland and Toledo Road earned

In Sept., 1861.....	\$24,638
1862.....	1,002
Increase.....	\$15,543

The business of this road for the current six months is as follows:

May.....	\$69,716
June.....	14,910
July.....	72,000
August.....	79,635
September.....	109,073
Oct., est.....	105,000
Total.....	\$491,352
Exp. of operating.....	225,400
Profits.....	\$265,953

Showing an increase in gross earnings of \$67,193. The above is the poorest half of the year. A similar increase in the next six months, ending April 30 next, would give gross earnings for the year:

About.....	\$1,150,000
Operating expenses.....	550,000
Sinking fund and C. C. & C. lease.....	\$600,000
Interest.....	\$504,666
	200,000
	\$238,100

Equal to 7 per cent. on capital stock

The rumors are renewed that a dividend will yet be declared before the 1st of January, in view of the fact that the funded debt due prior to 1864 has been provided for and the floating debt paid off.

—The earnings of the Toledo and Wabash Railroad Company for the month of September were:

Passengers....	\$92,483 35	\$21,481 40	Inc. \$1,001 90
Freight.....	147,896 52	121,056 05	Inc. 26,840 47
Total....	\$170,379 87	\$142,537 50	Inc. \$27,842 37

—Weekly statement of the earnings of the St. Louis, Alton and Chicago Railroad from Sept. 25 to 30 inclusive, 1862:

	1862.	1861.
Passengers.....	\$8,138 36	\$5,331 68
Freight.....	16,894 66	14,628 35
Sundries.....	815 33	815 33
Total.....	\$21,848 62	\$20,775 66
Increase in 1862.....	\$5,072 26	
Total this month to date.....	\$115,612 12	\$99,113 99
since Jan. 1.....	743,048 16	717,887 58
Military earnings.....	114,413 45	73,539 47
Total.....	\$859,461 61	\$791,427 25

Philadelphia, Wilm'gton & Baltimore RAILROAD!



FOUR PASSENGER TRAINS DAILY!

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11, P. M., Express.
On Sundays at 3.30, A. M., and 11, P. M.
Leave Baltimore for the North and West daily, at 8.30, A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail; and 7.00 P. M., Express.
On Sundays at 7, P. M., only.
Through connections made for all points at the North, East and West.

WM. CRAWFORD, Agent.

J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets

my21

CINCINNATI.

600,000 MALE or FEMALE AGENTS TO SELL
LLOYD'S NEW STEEL PLATE COUNTY COLORED MAP OF THE UNITED STATES, CANADAS, AND NEW BRUNSWICK.
From recent surveys, completed Aug. 10, 1862; cost \$20,000 to engrave it and one year's time.
Superior to any \$10 map ever made by Colton or Mitchell, and sells at the low price of fifty cents; 376,000 names are engraved on this map.

It is not only a County Map, but it is also a COUNTY AND RAILROAD MAP of the United States and Canada combined in one, giving EVERY RAILROAD STATION and distances between.

Guarantee any woman or man \$3 to \$5 per day, and will take back all maps that cannot be sold and refund the money.

Send for \$1 worth to try.
Printed instructions how to canvass well, furnished all our agents.

LLOYD'S TOPOGRAPHICAL MAP OF KENTUCKY, OHIO, INDIANA, AND ILLINOIS, is the only authority of Gen. Buell and the War Department. Money refunded to any one finding an error in it.
Wanted—Wholesale agents for our maps in every State, California, Canada, England, France and Cuba. A fortune may be made with a few hundred dollars capital. No competition. J. T. LLOYD, No. 161 Broadway, New York.

The War Department uses our Map of Virginia, Maryland and Pennsylvania, cost \$100,000, on which is marked Antietam Creek, Sharpsburg, Maryland Heights, Williamsport Ferry, Rhoderville, Noland's Ford, and all others on the Potomac, and every other place in Maryland, Virginia and Pennsylvania, or money refunded.
Price 50 cents.

From the Tribune, Aug. 2.
"LLOYD'S MAP OF VIRGINIA, MARYLAND AND PENNSYLVANIA.—This map is very large: its cost is but 25 cents, and it is the best which can be purchased."
LLOYD'S GREAT MAP OF THE MISSISSIPPI RIVER—From Actual Surveys by Capt. Bart and Wm. Bowen, Mississippi River Pilots, of St. Louis, Mo., shows every man's plantation and owner's name from St. Louis to the Gulf of Mexico—1,350 miles—every sand bar, island, town, landing, and all places 20 miles back from the river—colored in counties and States. Price, \$1 in sheets, \$2 pocket form, and \$2.50 on linen with rollers. Ready, Sept. 20.
NAVY DEPARTMENT, Washington, Sept. 17, 1862.
J. T. LLOYD—Sir: Send me your Map of the Mississippi River, with price per hundred copies. Rear-Admiral Charles S. Davis commanding the Mississippi squadron is authorized to purchase as many as are required for use of that squadron.

GIDEON WELLES, Secretary of the Navy.

3t.

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANA POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS. CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:00 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:00 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T., at 1:30 A. M. Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—6:30 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

Through Distance 280 Miles;

42 Miles Shorter than any other Route.

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M. 7:00 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without re-billing or transshipment.

JOHN BRANT, JR., Superintendent.

C. E. POLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent.

33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON, STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and tax collections.

KNOX & SHAIN, Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums by Franklin Institute.)
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T. F. RANDOLPH & BRO. Mathematical Instrument Makers

No. 67 West 6th St. bet Walnut & Vine

CINCINNATI O

BUSH & LOBDELL. Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

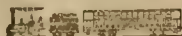
WHEELS FITTED

To Hammered or Rolled Axles

In the best Manner, at the Shortest Notice,

Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition

The well-earned reputation of this Road for
SPEED, SECURITY AND COMFORT
Will be more than sustained under the reorganization of its business.

In addition to the *Unequaled Attractions of Natural Scenery* heretofore conceded to this route, the recent *Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting WASHINGTON CITY en route*—being \$2.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the **ONLY ROUTE** by which passengers can procure *through tickets and through checks to WASHINGTON CITY*

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Beltsville, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

**NEW YORK, BOSTON,
AND ALL EASTERN CITIES,**

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston. Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6.

CHARLES MINOT, Gen'l Sup't

J. W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of

O. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

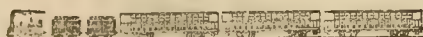
Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr. Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that they will be spared to give entire satisfaction.

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM

PITTSBURGH TO PHILADELPHIA

(with close connections from Western Cities.)

ALL CONNECTING DIRECT TO NEW YORK.

THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (430 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM

PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.

BOAT TICKETS GOOD ON ANY OF THE SOUND LINES

FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freight of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburg with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "PA. PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburgh.

CLARK & CO., Transfer Agents, Pittsburgh.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

W. W. ALKMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.

CLARK & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

O. B. NEAL, Parkersburg, Virginia.

HALL & CO., Marietta, Ohio.

H. S. PIERCE & CO., Zanesville, Ohio.

McDOWELL & McCORM, Portsmouth, Ohio.

R. McNEELY, Maysville, Ky.

J. P. JOHNSTON, Ripley, Ohio.

JOHN TODD, Covington, Ky.

G. L. HEATON, Cleveland, Ohio.

R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.

L. L. HOUSTON, Gen'l Ticket Agent, Philadelphia.

H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

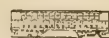
General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express	10:00 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton. RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:30 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	7:30 P. M.	10:10 A. M.
Day, Toledo & Day, Huntsville.....	5:20 P. M.	10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	6:00 A. M.	11:10 P. M.
Indianapolis and Terre Haute.....	6:00 A. M.	11:13 P. M.
Decatur, Springfield & Quincy.....	11:30 A. M.	3:40 P. M.
Chicago Night Express.....	6:30 P. M.	10:00 A. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	5:00 A. M.	10:05 P. M.
Seymour Accommodation.....	2:00 P. M.	1:15 A. M.
Louisville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omni-buses call for passengers as usual.

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MORRILL AND BOWERS—CLEVELAND, O.—In another column will be found the advertisement of the above well known firm of Railroad Car builders. Their shop is located at Cleveland near the line of the roads running eastward from that place, and the numerous samples of their work now running over various western railroads is an evidence of the excellence of their workmanship and the satisfactory manner of their doing business. In a recent visit to their establishment we had the pleasure of examining their machinery and inspecting the work in different stages of progress—the wood from the time it was taken from the yard and iron from the forge. We also saw samples of their platform and house cars and their street cars. In all the various stages of construction, we noticed the use of good material, care in workmanship and excellent final finish. We advise our railroad friends to call on them whenever they want any cars.

DESULPHURIZING COAL.

One of the greatest hinderances to the successful use of coal in locomotive furnaces, as well as in many other places in the arts, is the amount of sulphur contained in it, which corrodes the iron, fills the furnace with clinkers and otherwise impedes the operations which it is desired to perform. Of all the different processes hitherto introduced, to lessen these difficulties, that of coking has until recently been the only one that can partially overcome the trouble. But even this is but a partial process as from 4 to 5 per cent of sulphur is found in the best prepared coke. A process has recently been patented for accomplishing the entire removal of the sulphur by means of chemical re-agents without destroying any of the combustible material as is sure to be done in the partial combustion necessary to coking. The materials are cheap and the apparatus very simple. The cost of the process being only one cent per bushel, and the resultant material being strictly what its name purports *Desulphurized Coal*.

This is a great stride in the arts and must revolutionize many branches of mechanics. Hitherto no iron has been equal to the charcoal iron, and it has been a great desideratum in an iron furnace to be located near a dense forest. With this improvement it will only be necessary to seek what nature has placed in very close proximity—iron ore and coal. The Desulphurized Coal will take the place of Charcoal and a vast impetus will be given to the production of iron. So also it will be with the various subsequent processes in the use of iron—desulphurized coal employed as a means of melting, in the cupola will produce softer metal and insure better castings than even coke with its small percentage of residuary sulphur. Thinner cast-

ings will be made and iron will be more extensively used in manufactures.

Again, the sulphur charged coals hitherto used in the furnaces of steam engines and locomotives soon corrode the fire boxes and flues—desulphurized coal will have no such effect, and the result will be a greater proportion of locomotive and stationary boilers will be heated with coal than heretofore. There is not a use to which coal as a fuel has been hitherto applied but will feel the beneficial effects of the removal of the sulphur from the coal. The subject is one therefore of great interest and we trust will meet with the attention from practical men which its merits demand, and its importance must sooner or later command.

CHICAGO AND ALTON RAILROAD CO.—The reorganization of this Company on its new basis was perfected by the meeting of the Commissioners for the purpose, at the city of Chicago on Oct. 16th. The first Board of Directors was elected, and Jas. Robb, Esq., the Receiver under the appointment of the court, was elected President. The capital and liabilities of the company under its new auspices will be as follows:

Common Stock.....	\$1,700,000
Preferred Stock.....	2,300,000
First Mortgage Bonds.....	2,100,000
First Mortgage 7 per cent preferred sinking Fund Bonds.....	600,000
Income Bonds 7 per cent.....	1,050,000
Total capital and Liabilities.....	\$7,750,000

This on a road 256 miles in length is not a very large capital account. The road should be able to earn 7 per cent on the whole.

—The new bonds of the St. Louis, Alton and Terre Haute Railroad are now nearly all issued, and in the market. Under the favorable accounts of the traffic and the good condition of the railway, the managers of the line expect to accumulate a handsome surplus over the interest on the two classes of bonds. During the week the preferred stock will be issued. It will amount to about \$1,500,000, which, together with all the issues of bonds, makes \$8,000,000 on a line of two hundred and thirty miles.

OHIO & MISS. R. R.

An important decision has just been rendered in the United States Circuit Court in the case of the city of Cincinnati vs. the Ohio and Mississippi Railroad.

Judge Swayne delivered the opinion of the Court as to the claim of the city of Cincinnati to the first lien upon the track of the Ohio and Mississippi Railroad Company, to secure its loan of \$600,000 to the company.

It was claimed by the counsel for the city that the city acquired a lien on the road for its loan, when it took a pledge of the stock of the company for its security, because of the terms of the act of the Legislature empower-

ing the City Council to make the loan; and this proposition pressed with great vigor.

But the court, in an able opinion, disposed of the case by deciding, that the city had no security whatever, except the stock which was hypothecated.

T. C. Ware, the City Solicitor, and Henry Stanbury, represented the city; and T. G. Mitchell, solicitor of the Railroad Company, and W. C. Noyes, of New York, representing bondholders, resisted the claim.

THE CLEARING HOUSE SYSTEM.

The English railways years ago adopted a system for the settlement of their accounts, essentially different from that of our roads. They find it works well. The following is the description of this system as given in Dr. Lauder's *Railway Economy*:

When some progress had been made in the completion of the vast network of iron roads which now overspreads the United Kingdom, and when railway after railway, to the number of some thirty or forty, had been successively opened for traffic, and had effected junctions with each other, so as, in reality to form one connected system of internal communication, though under numerous independent administrations, an inconvenience arose which for some time appeared to menace the operations of railway establishments with insurmountable difficulties.

The exigencies of the transport had no relation with the arbitrary limits which separated the domain of one company from that of another. Passengers and goods require to be booked and continuously transported from one point of the kingdom to another. But no company possessed the power to do more than carry the passenger or the goods, to the limits of its own line; there they were handed over to another company, who, in like manner, carried them over its territory, and transferred them to a third, and so on. Each company had its own independent machinery of transport, consisting of engines, carriages, wagons and vehicles of every description. It had its own system of financial operations and accounts, and its own tariff; the consequence of which was, that the traveler was compelled, in passing every boundary between the rails of two adjacent companies, to pass from one carriage to another, with his luggage, no matter what would be the inconvenience attending such an operation, arising from inclemency of weather, or from the hour of night.

Great as was this inconvenience, that which attended the transhipment of goods was infinitely more grave. The wagons had to be unloaded, and their contents discharged upon wharves and platforms; and these had again to be reloaded upon the wagons of the other company.

Such an operation was not only attended with great expense, which must necessarily fall upon the expeditor of the goods, but also with serious delay, damage, and risk of loss. In short, the inconvenience to the public was so enormous, and the clamor which it excited, both among the commercial classes, and those who traveled by the railways was so irresistible, that it became manifest that some arrangement must be adopted by which the public might be accommodated, and the traffic, both in goods and passengers, expedited

over the railways of different companies without being re-booked, re-packed, or transhipped.

The point was practically conceded, and the traffic of all descriptions carried without interruption from the lines of one company to those of another.

But this immediately produced grave inconveniences and difficulties among the companies. A portion of the receipts which was paid into the hands of each company at various stations had to be paid over to other companies upon whose lines the traffic, whether goods or passengers, was carried. But besides this, the vehicles of every sort, belonging to one company were unavoidably used to carry traffic upon the lines of other companies.

Hence arose an intolerable chaos of cross accounts, out of which sprung vexatious disputes and much litigation.

The confusion and difficulty were at length removed, and this system of complicated debits and credits was reduced to perfect clearness and order by a happy thought suggested by the operations of the London bankers. The similarity of the reciprocal claims of the railway companies arising out of the operations just explained, to those of the London bankers arising from the bills and checks drawn upon others, received by each of them daily, struck the mind of Mr. K. Morrison, who suggested the plan of establishing a railway clearing house, founded on principles identical with those which had been so successfully brought into operation in the bankers' clearing house.

It is known that a check drawn upon any London banker may be paid to any other London banker, and placed to the credit of the customer who presents it; the banker receiving it undertaking to obtain its liquidation from the banker on whom it is drawn.

This, however, is offered only in an indirect manner; and, as we shall see, the liquidation is accomplished without the actual presentation of the check, or its payment in cash.

It is now about three-quarters of a century since the banking operations of London became so extensive and complicated, that the difficulties, arising from the daily settlement of the bills and checks respectively payable by each London banker to the others, called into existence the establishment now known by the name of the "clearing house," which is located in Lombard street, in the building formerly occupied by the Post Office. This establishment is placed under the direction of a committee delegated by bankers, who mutually associate for this purpose. Two salaried functionaries, called inspectors, have its immediate management, and are there present for the transaction of business. From time to time during the day, the bankers severally transmit to this office the checks and bills which they receive, and which are payable by other bankers. As fast as they arrive they are sorted and classed according to the bankers by whom they are payable, so that the checks and bills payable by each banker to the various other bankers are classed together.

The clerks from the several bankers who bring to the clearing house the bills and checks receivable by them take, at the same time, an account of the bills and checks which have arrived at the clearing house, and which are payable by them, and are thus enabled, toward the close of the day, to make up in their private books an account, as well of the checks and bills payable by them, as of those receivable by them.

The reception of bills and checks is continued at the clearing house until four o'clock, after which it ceases; and the interval from that time until about half past five is devoted to the adjustment of the accounts, which is accomplished in the following manner:

The clearing house, by a fiction, makes itself the common debtor and the creditor of all the bankers. It debits each banker with the amount of the checks and bills payable by him to every other banker, and it credits him with the amounts of all the checks and bills receivable by him from every other banker. This operation is facilitated and expedited by a simple printed form, which occupies a sheet of paper consisting of three columns; the left and right hand columns being left blank for the debits and credits, and the centre column being printed with the names of the bankers associated in the clearing house alphabetically arranged.

One of these accounts is filled up after four o'clock, as between the clearing house and each banker. The amounts of the bills and checks receivable by such banker are written on the right hand or credit column, opposite to the names respectively of the bankers by whom such bills or checks are payable, and the amounts of the bills or checks payable by such banker are written on the left hand or debtor column, opposite respectively the names of the bankers to whom such bills or checks are payable.

These statements, thus filled up, may be considered as a debtor and creditor account between the clearing house, representing all the bankers collectively, and the single banker with whom such account is formed.

When thus filled up, the statement is examined by the clerk of the banker in question, and each item is by him verified by reference to the clerks of the several other bankers. When thus verified, it is returned to the inspector, who signs it, and either receives or pays the balance, which appears at the foot of each account, according as the credits exceed the debits.

It is clear that the sum of the balances receivable by the clearing house must be precisely equal to the sum of the balances payable by it, so that the amount which it receives on the one hand liquidates the amount which it has to pay on the other; and, in reality, as must necessarily have been the case, it becomes the mere agent or channel through which the payments pass from one bank to the other.

In the practical working out of the business, there are numerous details, such as certain mutual settlements between clerk and clerk, with the sanction of the inspector, which, being of no importance to the principle of the institution, need not be noticed here.

To render clearly intelligible the operations effected by the railway clearing house, which has been established upon principles analogous to those of the bankers, it will be necessary, first, to explain the reciprocal interchange of business which takes place, creating systems of mutual credits and debits between company and company.

The number of companies who have combined their operations in this manner is at present (November, 1849) forty-five, comprising all those whose railways lie north of a line passing from Bristol through London to Harwich; in fact, all the railways of the kingdom, except the Great Western, the South-western, the London, Brighton and South Coast, the Southeastern, and their branches and collateral lines.

These railways possess 887 stations, at any one of which traffic may be booked for any other; the consequence of which is that there are nearly four hundred thousand different pairs of places within the circle of the operations of the united companies, between which traffic may be transmitted. In passing from any one such station to another, the traffic may pass over part of any or all of the lines of the combined companies with as much continuity of progress as if the whole system were under the government of a single company.

The service of the transport, whether of passengers or goods, consists, first, in the service of embarkation, which includes all the formalities observed at the station of departure, consisting of booking, weighing, loading, packing, &c.; secondly, of the transport, properly so called, which is represented by a mileage; and thirdly, of the formalities and services of the stations of arrival, where the traffic is unloaded, discharged and delivered, and frequently sent to the domicile of the party to whom it is addressed.

A certain rate of charge, according to the nature of the traffic, being agreed upon for each of these parts of the service of transport, the sum receivable for each object of transport must be divided among the companies over whose line it passes, including those at whose stations the traffic is received and delivered. But the sum payable for such transport is received either by the company at whose station it is delivered, or partly by one and partly by the other.

Two companies, must be therefore debited with the sums they thus receive, and they, as well as other companies intermediate between them, over whose lines the traffic may have passed, must be credited in the stipulated proportion according to the mileage.

The first object to be attended to by the railway clearing house is to adjust these complicated debits and credits, as well for passengers as for every species of goods, with simplicity, clearness and dispatch, and in such a manner as not to give rise to subsequent disputes.

But besides the interchange of credits for traffic, a most complicated account arises, out of the circumstance already explained, for the use of the rolling stock. The wagons of each of the numerous companies which enter into the union of the clearing house are driven indifferently over the lines of all the others, carrying traffic for various companies, and sometimes transporting a load no part of which is to be credited to the company owning the vehicle in which it is borne.

By mutual agreement, a certain fixed rate is charged for the use of each class of vehicles, and every company over whose lines the vehicles of other companies pass, being in the first instance credited for the traffic carried by these vehicles, is debited for the use of the vehicles themselves in which such traffic is carried. A mileage account must therefore be kept of all the rolling stock of the combined companies, so that the course of each may be traced from day to day and from hour to hour, so that its mileage may be debited to such companies as may have shared its use; and in case of undue delay at the stations of any company, a demurrage may be charged, according to a stipulated condition, proportional to such delay.

To adjust in a satisfactory and equitable manner these accounts for the mutual use of the rolling stock is the second function of the clearing house.

The passenger traffic, being liable to a gov-

ernment duty payable on booking to the company at whose station passengers are embarked, must necessarily pay this duty in advance, and must pay it for the entire trip for which the passenger is booked. This duty, however, is chargeable in the proportion of a mileage to all the companies over whose lines the passenger travels. Hence an account must be kept in which the booking company will be credited with the duty thus paid, and the several companies over whose line the passenger is carried will be debited in proportion to the mileage for their respective shares of the amount.

When the claims of one company upon another, arising out of these transactions, are not liquidated within a stipulated time, they are subject to interest at a rate agreed upon. An interest account must therefore be kept between company and company.

Luggage, parcels, and other objects of traffic being liable to be lost or unduly delayed, claims and complaints arise between company and company. The settlement of such claims enters into the class of operations to be transacted by the clearing house.

Such are the principal functions which the institution of the clearing house is called on to discharge.

(To be continued.)

THE BALTIMORE AND OHIO RAILROAD.

The vital importance of the permanent and thorough occupation and protection of the line of the Baltimore and Ohio Railroad has again been signally illustrated. This road, from the vicinity of Harper's Ferry to Cumberland, in Maryland, has been exposed, in consequence of the limited forces guarding it, to repeated attacks from the enemy. The success of these attacks has doubtless invited the late raid across that line into Pennsylvania and Maryland, and opportunity has thus been afforded Gen. STUART to accomplish one of the most brilliant and effective dashes which has ever been executed—thus again reviving the depressed condition of the Confederates, and creating the greatest annoyance and mortification to the loyal people of the North.

The loss of this great route, from the valley of the Ohio to tide water, has caused an enormous and oppressive advance in the rates of transportation from the producing regions of the West to the seaboard cities, and overwhelmed the remaining lines with a business beyond their capacity, whilst it has increased the danger of the Capital as well as the territories of Pennsylvania and Maryland.

To add to the grave difficulties surrounding this subject, it is currently stated that the rebels are planning an attack upon the Pennsylvania Railroad, and it is probable that the country may be shocked with the announcement of the destruction of the bridge upon the Juniata River, and of other important structures upon the Pennsylvania Road, also destroying a thoroughfare now of vast importance to the country, especially during the continuance of the blockade of the Mississippi River and the Baltimore and Ohio Railroad.

In view of the magnitude of interest involved, may the country not hope that the Government will immediately adopt measures which will save the people from perils and disasters, which may embrace the conquest of Western Virginia by the enemy, repeated raids into Maryland, Pennsylvania and possibly Ohio, by the continued deprivation of the

use for military and commercial purposes of one of the most important highways upon the Continent. We appeal to the Government to preserve the line of the Baltimore and Ohio Road as vital to the protection of all these great interests. The raid into Pennsylvania has cost the Government and the people of that State more money than would support an army sufficient to protect the road securely for months.—*N. Y. Times.*

GOOD POLITICIANS AND POOR STATESMEN.

A GREAT MISTAKE CORRECTED.

Those persons who make politics their trade, and seek to rise on the gusts of passion they themselves create, must be expected to use all the fuel they can pick up to raise the flame and rarify the atmosphere on which they are to ascend. Some of us remember, and all of us know, that when the great Clinton proposed the construction of the Erie Canal, the politicians of the hour took hold of it as a material of party, and a powerful opposition was got up against a measure which is the glory, as it has been the salvation, of the State of New York. Look at its magnificent income the present year of about five millions of dollars, enough to wipe out all the immediate claims upon its fund, and leaving six hundred thousand dollars for the use of the State. Had we listened to the arguments of its opponents it would never have been made. No friend, no advocate of internal improvements therefore, need fear the opposition of any mere politician. It is his trade to make the most of his opportunity.

We confess, therefore, we are not surprised at the remarks of Mr. James Brooks of the *Express*, which he took occasion to utter in a recent speech before the Democratic Union Association of this city on the 29th ult., in relation to the Pacific Railroad. To say that the speech is not an able one of its class, would be misrepresentation. Some of its views on the subject of arrests and imprisonment without hearing without trial and without law are clear and unanswerable, and many others which he offered have force; but when he asserted "that the appropriation of millions of money to a few wealthy corporators of the Pacific Railroad by Congress in time of war was a wasteful exercise of the power of appropriation," he was evidently talking about a matter he did not understand. Congress has appropriated no money at all to a few wealthy corporators. When a certain amount of stock is subscribed and a certain amount paid in, then the company which shall thus go into operation may, after building and completing forty miles of railway, receive the bonds of the Government payable in thirty years from date, at the rate of sixteen thousand dollars per mile; and for the Western sections, to the extent of three hundred miles between the Rocky Mountains and the Nevada, in parts the most mountainous and difficult of construction, bonds are also to be issued in the proportions of forty-eight thousand dollars and forty thousand dollars to the constructed mile. But the whole issue of the credits is limited to fifty millions of dollars; and if, as is contemplated by the act, the construction of the road will not be effected until 1874, then the advances by the Government of its bonds until that time will only be about five millions of dollars a year; less by two millions three hundred and fifty-seven thousand dollars, than it has been paying the

last year for its transportation to San Francisco by the present routes. Thus the enormous appropriations, so alarmingly contemplated by Mr. Brooks, melt away into dim and distant advances of credit, several millions per annum less in amount than the Government has been paying and is still paying for transportation to California. This fact is worthy of special notice. It demolishes all such arguments at a blow. The Pacific Railroad Company, in reality, will only borrow from the Government, during the next ten years, two millions and a third in credits annually of the amount it is actually compelled now to pay in cash to shippers, transportation, companies, railroads and overland expresses.

Is it then the interest of the Government to go on paying nearly eight millions a year cash, for it is almost that, to keep up its communication with California, Oregon and the Washington Territory, or to loan its credit merely for five millions annually on good security, get all its money back with interest, and save on its future transportation by using the railway, at least fifty per cent? The Government spends as many millions in a single week to carry on this war, and no one objects, as it will have to advance in the shape of credit to build this road for a whole year. The one expenditure, necessary as it is, proper as it is, loyal as it is, ends in a waste of life and property for the time being, puts back our material progress and seriously damages all our commercial interests, but in this case, on the contrary, the expenditure, or rather the credit, small as it is, is to secure life and property, advance our material interests, extend our commerce, and develop our resources beyond all present calculation. The politicians, therefore, who clamor for money for war purposes, seem to be ignorant that the waste and ruin of war must be anticipated, provided for, and can not be better repaired than by just such projects as canals and railroads.

Now then, as no appropriation of millions has been made, or is to be made, as alleged by Mr. Brooks, we need not notice at length that insinuation about its being given "to a few wealthy corporators." There were a hundred and fifty corporators and more named in the Act, and that there are some wealthy men among them we do not doubt; but the majority of them were gentlemen, selected without regard to means, from a class of enterprising, adventurous pioneers and explorers of the great and fertile West, who had yet their fortunes to make, and who only expect to make them by participating in the general prosperity which attends great internal improvements. These bore their own expenses, most of them traveling thousands of miles to take part in the proceedings, and to impress on their friends in the East the unspeakable importance of developing the great and dormant resources of the West. Nor was their appeal or their earnestness in vain. One had only to look around and see what Chicago is, considering what it very recently was, to admit the propriety of having as many more as possible of such great commercial centres in the West. The British Government is aiding in the immediate construction of railways in India which are to cost three hundred millions of dollars, and 1,181 miles are to be opened for traffic the present year.

So that the work to be performed by us is not of such vast proportions as to excite any alarm. We are fully equal to it. If Ohio has been able within a few years to construct 3,400 miles of railways, Illinois 2,484, New York 2,600, Pennsylvania 2,300, and Indiana

cramped and hampered as she has been, 1,280, we contend that the United States are competent to build this Pacific road of 1,500 miles or more, and in a very short time. Indeed, any one of the States we have mentioned would be able to do it; and California, which is eight times as large as New York, could undertake it alone, particularly as she has not as yet any debt incurred for a railway system of her own.

Never did the politicians, then, make a greater mistake than to attempt to drag this project into the dirty quagmires of party. Party has nothing to do with it. The last Congress was enabled to pass it solely because the Southern Representatives were not there to defeat it, as they always did every measure which they feared would help the North. This is a project which has been before the country for many years, and is well understood. If we wish to keep our possessions on the Pacific Ocean, if we wish California to dig out three millions of gold per month and send them to New York to pay our foreign differences, if we wish to make our country greater, if we wish to show our affection for our kith and kin within the Golden Gate which is continually open to us, then let us construct this road as speedily as possible, and frown down, oppose and defeat every demagogue who seeks to rise upon its ruin. Spend the fifty millions, if possible, the very first year if the line can thus be extended to the Nevada; let all other similar plans, schemes and projects give place to this until it is a fixed fact. It is not often in the life of a young nation that such an opportunity occurs, as this which is now ours. It took hundreds of years to find a way round the world, hundreds of years to cross a small isthmus, and now we have the chance of bringing the two greatest oceans of the world within a week's transit, of benefiting all the people who live upon their temperate shores, securing all their vast and valuable products, supplying their wants and controlling all their exchanges. The whole European and Asiatic world, it may be fairly considered, will be peacefully conquered by this great project. Let no small fry orators inveigh any more against its policy, or defame those who advocate it. Mr. Brooks is fond of Latin quotations, we will give him one: *Ne sutor ultra crepidam.*—*Am. R. R. Jour.*

THE VAN NEST GAP TUNNEL.—The completion of this stupendous work, which, had it not been for the overshadowing proportions of the rebellion, would have commanded a goodly share of public attention, has been permitted to be accomplished without any demonstration, or even a passing public notice. The tunnel is excavated for double track, is 3,002 feet long, and penetrates the Oxford Mountain at Van Nest Gap, near the flourishing and beautiful village of Oxford Furnace, New Jersey. It was built for the Warren Railroad, being part of the line of the Delaware, Lackawanna and Western Railroad, and was commenced in 1854 by *Rutter and Du Puy*, contractors, and was finished some months since by Messrs. *McAllister and Westling*, both of the latter having been interested in the work since the commencement. The rock is of a syenitic formation, and during the progress of the job almost every form of underground operations proved necessary. From the hard, seamless rock, offering the most stubborn resistance to construction, every degree of formation was encountered, to quicksand, with an unusual quantity of water. Almost one-half of the tunnel is sub-

stantially timbered and arched with masonry; the balance, being carefully and skilfully excavated through the solid rock, requires no artificial support.

The work was prosecuted with that degree of rapidity, dictated by the interests of the company, and was attended with less of accidents and riots than usually mark undertakings of such magnitude. In the parapet, at the west end of the tunnel, is a handsome marble slab, on which is chiseled the dates of commencement and completion, and the names of the President of the Warren Railroad, Mr. *John J. Blair*; the Chief Engineer, Mr. *James Archibald*; and the contractors, Messrs. *McAllister and Westling*—to whose energy and ability this great work will prove a lasting and enduring monument. The Warren Railroad is leased and operated by the Delaware, Lackawanna and Western Railroad Company, and the good effect on the interests of this company caused by the completion of this work, by which about six miles of heavy grades and stiff curvature is avoided in the round trip, can not but be marked.

No heavy grades or other impediments to long coal trains now present themselves from the summit near Scranton to tide-water. The capacity of the road is ample; its past has been marked with success; and while the greatest credit is due to the originators of the enterprise, the ability of the present administration can not fail to bring all the anticipations of its most sanguine friends to a speedy realization.

At the annual meeting of the stockholders of the Toledo and Wabash Railroad Company, held in Toledo on Wednesday, the following persons were unanimously elected directors for the ensuing year: Azariah Boddy, New York; Joseph B. Varnum, New York; Hector Morrison, New York; Isaac H. Knox, New York; William Baker, Toledo; Warren Wayne, James Spears, La Fayette; George Cecil, Logansport; John Ross, New York; William Kidd, Rochester; Francis W. Tracy, Buffalo; Chauncey Vibbard, Albany; James R. Jessup, New York.

The earnings of the Hudson River Railroad for the year ending Sept. 30, were as follows:

	1860-61	1861-62
October.....	\$193,950 64	\$174,280 30
November.....	169,543 71	197,761 77
December.....	220,370 19	246,291 99
January.....	293,157 37	207,330 18
February.....	205,342 69	281,569 10
March.....	167,559 93	308,063 46
April.....	139,750 84	202,346 11
May.....	150,807 63	192,442 41
June.....	122,682 83	151,427 24
July.....	114,804 23	159,768 83
August.....	135,298 67	191,442 33
Sept.....	146,424 30	212,118 48
Total.....	\$1,989,698 14	\$2,636,712 78
Increase.....		\$637,014 64

ATLANTIC & GREAT WESTERN R. R.—We understand that the Atlantic and Great Western broad gauge road was opened October 24, to Meadville, Crawford county, Pennsylvania. The additional section thus completed gives one hundred miles West from the line of the Erie road at Little Valley. The next section to be opened will carry the road to Warren, where it will connect with the Cleveland and Mahoning line into the city of Cleveland.

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bonds.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	64	48	\$	\$	\$	\$	\$	Sept. 30, 1860	Maryland Sterling.	3,000,000	5			
Baltimore and Ohio.....	Md.	64	380	13,111,800	10,781,833	566,07	3,922,203	2,305,788		Mortgage.....	2,500,000	6	95	1885	
do do										"	700,000	6	84	1880	
do do										"	1,125,500	6	90	1875	
do do										"	1,000,000	6		1867	
do Washington Branch.....	Md.	30		1,650,000						1st Mortgage.....	791,000	7	55	1866	
ellefontaine and Indiana.....	Ohio & Ind.	118		1,859,813	1,256,750	139,128	314,090	8,795	Dec. 1860.	2d "	160,000	7		1870	
do do															
Buffalo and State Line.....	N.Y. & Pa.	135	68	1,950,950	1,049,000	27,547	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000	6	100	1864	
Camden and Amboy.....	N. J.	96		3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	450,000	7	62 1/2	1861	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	507,633	71,356	Aug. 1, 1859	1st "	800,000	7	80	1864	
do do										2d "	80,000	7	64	1865	
do do										3d " S. F.	950,000	7		1865	
do do										4th " S. F.	1,365,800	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,470,000	7	100	1865 & 1870	
do do										2d "	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d "	1,535,000	7			
do do										3d "	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d "	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)....	Wis.	194		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	101 1/2	Feb. & Aug.	
do do										2d "	3,600,000	7	60	Feb. & Aug.	
do do										3d "	2,000,000	6	26	May 1.	
Chicago and Rock Island.....	Ills.	84 1/2	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	103	1870	
Chicago, Burlington and Quincy.....	"	109	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	110	1863	
do do										2d " S. F.	813,000	8	108	1860	
do do										1st Mor. Chi. & Aur.	399,000	7		1867	
do do										2d "	303,000	7		1869	
do do										1st " Cent. Mil. Tract	394,000	7		1864	
do do										2d "	245,000	8		1868	
Chicago, Iowa and Nebraska.....		82		No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	105	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	950,000	7	100	1860	
Cincinnati Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
Cleveland and Mahoning	Ohio.	68 1/2		1,167,473	1,712,000	289,605	375,691	233,173	Dec. 31, 1861.	Income.....	305,509				
do do										1st Mortgage.....	850,000		80		
do do										2d "	469,000				
do do										3d "	344,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	40	196	In hands of Receiver.	4,918,325	653,891				1st Mortgage M. L.	800,000		100	1860	
do do										2d " M. L. or 1st Ex.	1,188,000		96 1/2	1873	
do do										3d 2d Ex.....	1,165,000		81	1865	
do do										4th 3d Ex.....	1,154,000		73 1/2		
Cleveland and Toledo.....	Ohio.	70	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	359,000		104 1/2	1867	
do do										1st " 2d Div.	263,000			1872	
do do										2d "	265,000			1862	
do do										1st " Tol. Nor. & Clev	521,000			1863	
do do										2d "	293,300			1864	
do do										Junction Income..	44,500			1864	
do do										C. & T. Income.....	300,000			1864 & 1890	
Cleveland, Columbus and Cincinnati.	Ohio.	135	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000			1861	
Cleveland, Painesville and Ashtabula..	"	135	98 1/2	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000		106	1861	
do do										2d "	303,000			1862	
Columbus and Xenia.....	Ohio.	115	54 1/2	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700		100	1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000				
Dayton and Michigan.....	"	142		2,176,666	2,512,000	292,267	375,002	212,107		2d "	2,212,000		50		
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000		90	1875	
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000			1866	
do do										2d "	1,000,900	8			
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		956,061	1,219,100	249,868	124,140			2d "	180,000				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
Galena and Chicago Union.....	Ills.	85	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	2d "	1,320,000		104	1869 & 1863	
do do										1st Mortgage.....	1,993,000			May 1, 1875	
do do										2d "	1,320,000				
Great Western	Ills.	175		1,600,000	2,391,000		45,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										2d " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago... Greenville and Miami.....	Wis.	84		400,000	No report	75,000	63,141	13,573		Land Mortgage...	5,000,000		26		
Hannibal and St. Joseph.....	Mo.	206		1,041,026	10,554,000	220,306	996,907	512,933	Sept. 1, 1860.	Mortgage Conv.....	1,354,000		45		
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1866	1st Mortgage.....	927,000	6	30	1873	
Hudson River.....	N. Y.	73 1/2	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	100	1869 & 1870	
do do										2d S. F.	2,000,000	7	103 1/2	1870	
do do										3d "	1,840,000	7	104	1875	
Illinois Central.....	Ills.	82 1/2	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000	7	107	1868	
do do										Construction.....	12,885,000	7	100	1875	
do do										"	4,115,000	6	97	1875	
do do										Debentures.....	42,740				
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	2d "	600,000	7			
do do										Income.....	33,700	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000			1866	
do do										2d "	400,000		90		
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort..	200,000				
do do										1st Mortgage.....	649,884				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d "	314,000				
Iowa.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Interest.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000	7	75	1861
Jeffersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st	249,000	7	70	1861
do										2d	392,000	7		1873
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,632	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st	260,000	7		
do										2d " Conv.....	1,000,000	7		
do										3d	600,000	7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	901,000	80		
do										2d " E. D.	1,000,000			
do										1st Land Grant W D	4,000,000	21		
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.	29		514,433	130,000		107,914	43,267	June 30, 1861	1st Mortgage.....	130,000	6		
Little Miami.....	Ohio.	63					1,330,030	529,981	Jan. 1, 1862	City Loan.....	174,000	6		1863
Louisville and Frankfort.....	Ky.	63		1,169,59	384,519		245,910	98,679	June 30, 1861	1st Mortgage.....	248,000	7		
do										1st	2,000,000	7		
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000			
do										1st " Memphis Br.	500,000			
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,020	Dec. 31, 1860.	1st Mortgage	600,000	7		1861
Marietta and Cincinnati.....	Ohio.	203		8,561,213	196,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868
do										2d	2,000,000	7		
do										3d	1,500,000	7		
do										Sterling Income.....	333,000	4		
Michigan Central.....	Mich.	92	284	6,057,784	7,968,480	125,000	2,126,699	910,169	May 31, 1861	Domestic	928,617	6	98½	1872
do										1st Mortg? Sterling	467,483	6	84	1869
do										1st " Conv.	500,000	8	90	1860
do										1st " unconv.	250,000	8	106	1869
do										1st " Dollar Conv.	2,598,000	8	115	1862
do										1st " S. F. Conv.	4,153,000	8	108	1860
Michigan South'n & North'n Indiana	Mich.&	454	246	9,018,200	9,714,764	437,886	2,075,459	1,039,929	Mar. 31, 1861.	Mort. Mich. So.	991,000	103		1861
do										" Nor. Ind.	985,000	101		1860
do										" Goshen Line.	1,168,000	101		1860
do										S. F. Toledo	2,850,000	101		1885
do										2d Mortgage	2,465,000	100		1877
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d	200,000	7		
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8		
do										2d	600,000	8		
Milwaukee and Prairie du Chien.....	Wis.	36	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	102	1891
Milwaukee and Western.....	Wis.	71												
Mississippi and Missouri.....	Iowa.	35		No report						1st Mortgage Conv.	1,000,000	7	96	
do										2d " S. F.	400,000	8		
do										Oskaloosa Div.	1,425,000	7		
do										Land Grant.....	7,000,000	7		
New Jersey.....	N. J.	34		4,397,200	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000	109		
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.					
New York and Erie Pref.....	N. Y.	89		Sold under mortgage			5,590,916	1,979,405	Sept. 30, 1860.	1st Mortgage.....	3,000,000	105		
do		64								2d	4,000,000	110		
do										3d	6,000,000	107		
do										4th	4,900,000	104½		
do										5th	1,792,500	100		
New York and Harlem Pref	Conn.	50	138	5,717,190	6,055,752	.....	1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	103	1873
do common		22½								2d	1,000,000	7	105	1864
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7	94	Dec. 1, 1866
do														Oct. 1, 1875
New York Central.....	N. Y.	107	356	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.	7,925,000	6	109	May 1, 1883
do										Mortgage.....	3,000,000	7	109	June 15, 1864
Northern Central.....	Md.	138		2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,066,500	6		
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6		
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased.	9,880,000	2,330,030	898,617	153,609	May 1, 1861.	1st Mortgage.....	2,193,500	7		
do										3d	316,995			
do										Construction.....	4,637,920			
do										Income.....	3,591,183			
Ohio and Mississippi, Western Div....	Ills.	148		.....	3,292,403		No report			State Loan.....	7,000,000	6		
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" " S. W.	2,800,000	6		
do										Construction.....	4,500,000	6		
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,900,000	6	104½	1888
do										2d	2,319,000	6	98½	1875
do										3d " Sterling.	1,957,440	5	89	1875
do										State Works.....	7,200,000			
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report							
Philadelphia, Wil. and Baltimore.....	Del.	98		5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage	2,300,000	6	92½	1884
do										Improvement.....	119,000	6		1863
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	594	467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	1st Mort. O. & P.	1,000,000	7	105½	1865
do										2d "	750,000	7	94½	1866
do										1st " O. & I.	1,000,000	7		1872
do										2d	380,000	7		1873
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,553	29,890	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000			
Racine and Mississippi.....	Wis.	104		2,703,720	1,417,900	1,085,328	220,850	68,43e	May 10, 1861.					
Sandusky, Dayton and Cincinnati. .	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856
do										"	997,000	7		1866
do										"	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886
do and Hocking Valley.....	Ohio.	56		401,975	500,000	100,000	110,200	53,100						
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000			
do										2d	450,000			
Steuensville and Indiana.	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d	900,000	7		1865
Terre Haute, Alton and St. Louis.....	Ills.	208		No report						1st Mortgage Conv.	1,000,000	7	99	1862
do										2d " Conv.	2,000,000	7	99½	1868 & 1870
do										1st " Bel. & Ill.	517,000	7		1873
Terre Haute and Richmond.....	Ind.	165	73	1,381,450	230,000	none.	377,602	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	106	1866
Toledo, Wabash and Western.....	Ohio & Ind	31	243	2,123,506	5,896,049	52,389	233,546			1st Mortgage.....	3,400,000	7	99	Aug. 1, 1865
do Preferred		73½								2d	2,500,000	7	89	Nov. 1, 1878
do										Mort. Coupons....	90,449	7		1860 to 1865

THE COMPASS SUPERSEDED IN UNDERGROUND SURVEYS.

SURVEYING WITH THE CAMERA OBSCURA.

To all who have practiced with the compass in surveying, it is known that its use presents many objections, amongst which its annual, diurnal, and local variations, as well as the sudden magnetic storms, are not to be overlooked when any degree of accuracy is required. However, it is in constant use, and is even considered indispensable in underground surveys, at least to determine the datum line. That it can be dispensed with altogether I shall endeavor to show. I employ an oblong shaped box, of any convenient size, in which is placed, at an angle of 45°, a reflector, with its reflecting surface downwards; this box is fixed in the central part of a board, slightly wider than the box, and sufficiently long to cross the aperture of a shaft; it has a longitudinal opening along the side of the box, about 2 inches broad, and extending (say) a foot each side the box; at its middle is stretched a fine wire. At the bottom of the shaft is a similar box fixed upon a tripod, and turning on a pivot; the reflector is also placed at an angle of 45°, but with the reflecting surface upwards; along the side is a small telescope, cut diametrically by two fine hairs, and turning on a pivot, so as to allow the vertical and horizontal positions; there is also a tube containing a lens of long focus. Now, the way of using the apparatus is as follows: The box, No. 1, is placed over the shaft, and a pole is planted at a convenient spot of the surface ground; No. 2 is carried down the shaft, and placed as nearly under No. 1 as can be done by the naked eye; the telescope is brought to its natural position, and if one of its diameters coincides with the wire in the longitudinal opening of No. 1, the apparatus is in its right place, if not it must be removed until this end be attained; next, a light screen is placed in a vertical position, at a distance corresponding with the focus of the lens, and opposite to it. Now, the reflected image of the pole at the surface ground is beautifully depicted on the screen in its vertical and true position and direction, which may be proved by lowering the telescope in its horizontal position, when its other diameter will coincide with the pole thrown on the screen. I need scarcely add that the tube of the apparatus and the reflected pole on the screen are two points of the datum line. By having the boxes made to swing in an oblique direction, it does not matter whether the shaft be perpendicular or sloping.

In order to obviate the inconvenience of viewing the wire behind the box at the top of the shaft, with the telescope in a vertical position, a telescope, with a mirror at 45° angle between the object glass and eye-piece, may advantageously be made use of. Nor is there any necessity for using a compass to determine the bearing or polarity; to this effect I proceed as follows: I look out for an even spot on the surface ground; I trace on the same several concentric circles, at the centre of which is placed a style; this done, I observe the moment the extremity of the shadow of the style falls on the circumference of one of the circles, and mark the place; this is in the forenoon. In the afternoon I observe again the moment the shadow falls on the same circumference; next, I bisect the arc contained between the two marks, and the point of bisection and the common centre of the circles are two points of the meridian of

place, or the direction of the true north and south. This line, it is hardly necessary to state, being brought in connection, by angulation, with the datum line already determined, will give the polarity with an accuracy not to be attained with the compass.—*Swansea, (Wales) Aug. 25.*

D. DE LANGUE.

PEORIA & OQUAWKA R. R.—Tilden Moulton, Esq., Master in Chancery of the United States Court, sold on Thursday last the west end of the Peoria and Oquawka Railroad for \$2,320,000. The sale was made under a decree of foreclosure of the second mortgage bonds entered by Judge Drummond. The property was bought by Mr. James F. Joy, acting for Messrs. Sidney Bartlett, Nathaniel Thayer, and John W. Weeks, trustees for the second mortgage bondholders. Mr. Joy was the only bidder.

LOCOMOTIVE EXPLOSION.—A very serious boiler explosion occurred at Jersey City on Saturday last, near Long Dock on the Erie Railroad. The description of the accident we take from the local papers.

The engine, No. 164, was brought down from the shop at Paterson on Saturday, and arrived in Jersey City about 1 P. M.; it stood in the engine-house until nearly 6 o'clock with the fire up, for the purpose of taking out a freight train which was to leave about 7½. The man employed to take care of the engines noticed that the engine was blowing off steam very rapidly, and upon getting up on the platform saw that there was from 145 to 150 pounds of steam on; he then ran her up and down the road for the purpose of reducing the steam. While so engaged, the engineer, Wm. Root, came and took possession of the engine. At this time there was 140 pounds of steam, which is 20 pounds more than is allowed by the instructions for running. The engineer also ran the engine up and down the road, and finally ran down to a building for the purpose of having sand put on board, which is used for sanding the track when the wheels slip. While two of the firemen and oilman were engaged shoveling on the sand, the explosion occurred, instantly killing the engineer, two brakemen, and the oilman, the fireman died half an hour later. The conductor and a boy were injured.

The engine and boiler was broken into thousands of pieces, which were scattered in all directions for a great distance. One piece of the boiler, larger than a man's hand, was found yesterday morning near the gas house, nearly five blocks away. Another piece, nearly two feet square, was thrown over fifty rods and landed in the street. The axle of one of the large driving wheels was broken off, and the wheel was carried bodily over a ditch and landed 20 feet distant. A large piece of boiler struck the wheels of a platform car, standing on a side track, and broke the iron axle. The tire of a driving wheel struck a box car and made a wreck of it. A chunk of iron went through a small house occupied by a flagman and just escaped his head; another piece passed through the iron smoke-stack of a locomotive, and another whistled over the head of Mr. Goff, who was just entering his house some distance away. The rails under the driving wheels were broken into several pieces. The forward part of the engine with

the fore-truck was driven forward some 25 feet, and the head of the engine entirely reversed.

PITTSBURG, FORT WAYNE & CHICAGO R. R.

The company make the following official statement of their condition up to August 31:

Cost of railway, equipment, structures etc.	\$18,917,566 24
Stock of supplies for current operations	364,211 91
Due from other companies	67,875 45
Miscellaneous assets	287,012 60
Cash in hand	416,441 12
Total	\$19,154,107 36
Capital stock	\$4,819,942 02
Funded debt	12,935,172 00
Due to other companies	52,159 79
Miscellaneous liabilities	12,070 83
Due for current expenditures in August and prior	197,087 67
Balance to credit of income acct.	136,764 05
Total	\$18,154,007 36

The total amount of cash on hand is \$416,431 12. The earnings for eight months have been as follows:

Freight	\$1,473,040 30
Express	20,000 00
Passenger	590,814 83
Mail	62,600 00
Rents	2,245 36
Rent of railway	56,666 64
Miscellaneous	4,901 91
Total earnings, as shown in income acct.	\$2,211,169 04
Cost of purchase of R. R., etc., as ascertained to this date	\$18,663,595 18
Less amt. of st'k of P. & W. & C. R. Co. not yet surrendered for conversion into this co's st'k	\$1,433,653 14
Amt. of supplies in shops and on the line of R. R. at the time of purchase by Trustees	312,375 74
	1,746,028 83
Present cost of railway etc., as shown in general acct.	\$16,917,566 28

So great has been the increase of business on this road, that the company is putting up at Chicago a new brick and iron freight house 350 feet in length.

The success attending the re-organization of this road, in its consolidated form, is an evidence of the superior advantages of long lines under one control, over the same roads when broken in short lines and divided in management and interest.

—The earnings of the Toledo and Wabash Railroad Company for the second week in October were:

Passengers	\$5,399 00	\$4,225 40 Inc.	\$1,173 60
Freight	30,742 15	30,908 59 Dec.	166 44
Total	\$36,141 15	\$35,133 90 Inc.	\$1,007 16

—The Cleveland and Toledo Road earned, the second week in October:

1862	\$23,476
1861	20,853
Increase	\$2,619

—The exports of the week from the port of New York are the largest in the history of this port, exceeding five millions. Annexed is a comparative statement exclusive of specie, for the week ending Oct. 21, and since Jan. 1. The figures are:

	1860.	1861.	1862.
For the week	\$2,072,047	\$3,815,470	\$5,077,436
Previously rep'ted.	75,434,234	101,338,116	113,962,601
Since Jan. 1.	\$77,506,341	\$105,151,586	\$119,040,037

MONETARY & COMMERCIAL.

The past week has been marked by no very exciting events in the commercial world. Gold has not fluctuated as noticed in our report of last week and there is evidently more confidence felt in the policy of the Government. The removal of Gen. Buell from the command of the army of Kentucky, for allowing the rebel army under Bragg to escape, is thought to indicate a more vigorous policy in the prosecution of the war. Had all generals who allowed the enemy to escape when they had it fairly in their power to crush him in the attempt, been promptly removed and those generals who displayed vigor and ability on the battle field been as promptly promoted for their services, it is quite safe to say the war, as a war, would have been over long ago. It is to be hoped that the policy of the Government in this respect has undergone a real and radical change, and that the War Department will look over its list of battles and select from among our successful generals able and vigorous men to be placed in high command. If this is done and success follows success to the Union arms, gold will decline, European exchange will again sink to an actual standard and confidence to the permanency of Republican institutions will be restored. If this is not done, it is difficult to foreshadow the course of events. Partial successes may keep currency and gold in constant fluctuation or total loss of confidence may run it up to prices even more fabulous than the present ones were regarded a year ago.

In support of our views we adduce the following statements of the movements from the port of New York.

The following is the export of specie from New York for the week ending Oct. 22:

Steamship Persia, for Liverpool:	
American gold coin.....	\$762,500
American gold bars.....	240,899
French Gold coin.....	5,850
Steamship City of New York, for Liverpool:	
American gold coin.....	\$649,447
American gold bars.....	38,185
Novareigna.....	83,297
English Silver coin.....	15,000
Steamship Hansa, for Southampton and Bremen:	
American gold coin.....	\$15,000
American gold bars.....	88,101
German Gold coin.....	500
Total for the week.....	
\$2,024,320	

The total exports of the same week including general merchandise, dry goods and produce were over five millions, which is two millions in excess of the imports. If we include specie the excess of exports over imports was over four millions of dollars.

There is therefore nothing in the actual condition of business to warrant the enormous prices of gold. Confidence is all that is wanting and that can only be supplied by the action of the government.

In striking contrast with our want of confidence in currency is the high estimate placed upon American securities abroad.

With reference to the market for American

securities, Mr. E. F. Satterthwaite reports as follows:

The market in London for American securities during the past week has been steadily maintained, quotations being supported by each succeeding telegram from New York reporting higher prices.

To day the market has been quite excited, and large purchases of Illinois and Erie shares made, the former touching 41 discount and the latter 31½; even at these rates we are \$2 per share lower than the last New York rates, taking exchange into consideration. State and Railroad bonds are firmer, with few offering. Atlantic and Great Western bonds have advanced 2 per cent.

Exchange has been in limited demand but quotations are not sensibly affected. Rates are as follows:

	Buying.	Selling.
New York.....	½ dis. to par.	par to ½ prem.
Philadelphia....	¾ " par.	par to ¾ prem.
Boston.....	¾ " par.	par to ¾ prem.
Gold.....	27 to 28 prem.	par to 30 to 33.
Silver.....	20 to 23 prem.	25 to 26 prem.
Demand Notes..	24 to 25 prem.	

In merchandise we notice a general tendency to increased prices. Paper for example has increased nearly 40 per cent. while all manufactures of iron have also gone up.

Money continues abundant at former rates, first class paper sells readily at 8 to 10 per cent. or even lower, while less favored names are exceedingly difficult to negotiate.

The indications are that a large packing business will be done at this point this season some purchases have already been made for delivery in November at \$1.50 to \$4.75. New lard sells readily at 9½ cts. Old mess pork sells at \$10.50 to \$11.00. Bacon shoulders at 5 cts. Green Hams 6 ½ cts.

Flour is about where we quoted it last week. Wheat, prime red is quoted at \$1.00 and white \$1.10 with a tendency to rise.

The San Francisco Shipping List of the 30th ult. says:

Our money market continues active. A steady and somewhat pressing demand has existed almost the entire period under review. The causes of this stringency have already been alluded to. A heavy drain of coin for Eastern remittances, for Washoe investments, for duties, and for advances upon country produce, has so reduced the volume of currency, that the operations of money lenders are absolutely restricted by it. The deliveries from the mint do not keep pace with the requirements of the market. Bank accommodation rules very stiffly at 2 per cent, with a full line of discount. For ordinary business purposes money can be obtained at that rate upon satisfactory paper, but outside operations are growing in disfavor.

The sluggishness of our export trade is another cause of pecuniary pressure. Usually at this season a large amount of grain bills and other commercial exchange finds its way into market and relieves the demand for gold.

But the present year is an exception, and unless freight or produce decline, the difficulty arising from this source seems likely to continue for some time to come. Orders for our breadstuffs have been reduced in limits; some in fact, have been countermanded altogether.

Receipts of treasure from the mines since our last reference amount to over \$1,200,000, and will doubtless be greatly augmented by expresses from the interior to night. Of the above sum only \$114,000 was in coin, the remainder in dust and bullion, of which the mint has taken about \$300,000. Even with the addition of to night's receipts, the available supply of bullion tomorrow, cannot be large, unless the arrivals by private hands greatly exceed the usual estimate. Gold bars during the period under review have been purchased by bankers and dealers, in a few instances as low as 780; but generally at about 800. To-day the price demanded by leading holders is 800@820. Silver may be quoted at ½ per cent premium to 2½ per cent discount. sales of \$50,000 Ophir Bars are reported at ½ premium.

Exchange on the Atlantic Cities is entirely unsettled by the telegraphic news. Lower rates for currency bills will, without doubt, prevail. The complexion of to nights dispatches will settle the matter. The figures generally talked of are 12@16 per cent discount, according to amount and mode of computation. Bills payable in coin rule at the old rates. Sterling is unchanged; bankers' bills at 48d.; Commercial at 49@49½.

Legal tender notes have maintained their position very steadily at 9 @ 10 ½ cent discount. The amount in the market is quite limited—the whole sum disbursed by the Sub-Treasurer scarcely exceeding, as we are informed, \$600,000, of which a considerable portion has been absorbed by Eastern remittances. The demand for Federal taxes will be delayed, we presume, for a short time only by the failure of the Department at Washington to supply our Collector with the necessary stamps and other documents. The Legal Tender Note question is becoming better understood every day, notwithstanding the efforts of various parties to mystify it with crude essays.

The stale and senseless outcry of disloyalty against our merchants and bankers is met by the stubborn fact that the issues of Government in this market at the present moment are at least 10 ½ cent. higher than in the loyal and patriotic cities of the Atlantic seaboard, and will buy even that much more of gold, though unaccepted by us as a currency. We are absolutely doing better by the Government, so far as this matter is concerned, than New York and Boston.

Mexican dollars are in very light supply, and nominal at 10 ½ cent. premium.

The exports of treasure for the month of September have been:

Sept. 1—Per Constitution—	
To New York.....	\$876,137 45
To England.....	417,839 45
To Panama.....	43,318 50
Sept. 5—Per Western Continent to Hong Kong.....	142,339 90
Sept. 8—Per Pacific to Victoria, R. C.....	36,571 71
Sept. 11—Per Orizaba—	
To New York.....	754,840 91
To England.....	160,494 21
To Panama.....	5,000 00
Sept. 20—Per Golden Age—	
To New York.....	800,014 07
To England.....	347,467 18
To Panama.....	10,000 00
Sept. 27—Per H. Brigham, to Hong Kong..	125,571 31
Total.....	\$3,719,574 69
Previously this year.....	25,920,240 99
Total since January 1, 1862.....	\$29,639,615 68
Corresponding period 1861.....	30,452,106 23
Falling of this year.....	\$812,190 55

—The following are the receipts of the St. Louis, Alton and Terre Haute Railroad Company for the first two weeks in Oct., 1862:

	1861.	1862.
From passengers.....	\$8,976 30	\$12,810 75
From freight.....	24,948 20	33,223 30
Total.....	\$33,924 50	\$46,034 05
Increase in 1862.....		\$12,109 55

—The following shows the earnings of the Michigan Central Railroad Company for the past four months, commencing at the beginning of their present fiscal year:

	1861.	1862.
June.....	\$133,679	\$174,001
July.....	123,377	172,139
August.....	144,082	216,624
Sept.....	236,845	293,956
Total.....	\$638,983	\$858,770
Against same month 1861.....		\$634,823
Gain in four months over last year.....		\$229,847

—The Rock Island Railroad earned in September:

1861.....	\$145,897
1862.....	136,111
Decrease.....	\$9,786

—The earnings of the Buffalo, New York & Erie Railroad for Sept. were:

1862.....	\$70,667 20
1861.....	51,212 40
Increase in 1862.....	\$19,864 80

Philadelphia, Wilm'gton & Baltimore RAILROAD!



FOUR PASSENGER TRAINS DAILY!

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11. P. M., Express.
On Sundays at 3.30, A. M., and 11. P. M.
Leave Baltimore for the North and West daily, at 8.30, A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail; and 7.00 P. M., Express.
On Sundays at 7. P. M., only.
If Through connections made for all points at the North, East and West.

WM. CRAWFORD, Agent.

J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets

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600,000 MALE or FEMALE AGENTS
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LLOYD'S NEW STEEL PLATE COUNTY COLORED
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From recent surveys, completed Aug. 10, 1862; cost \$20,000 to engrave it and one year's time.
Superior to any \$10 map ever made by Colton or Mitchell, and sells at the low price of fifty cents; 370,000 names are engraved on this map.

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LLOYD'S
TOPOGRAPHICAL MAP OF KENTUCKY,
OHIO, INDIANA, and ILLINOIS,
is the only authority of Gen. Buell and the War Department. Money refunded to any one finding an error in it.
Wanted—Wholesale agents for our maps in every State, California, Canada, England, France and Cuba. A fortune may be made with a few hundred dollars capital. No Competition. J. T. LLOYD, No. 164 Broadway, New York.

The War Department uses our Map of Virginia. Maryland and Pennsylvania, cost \$100,000, on which is marked Antietam Creek, Sharpsburg, Maryland Heights, Williamsport Ferry, Rhorersville, Noland's Ford, and all others on the Potomac, and every other place in Maryland, Virginia and Pennsylvania, or money refunded.
Price 50 cents.

From the Tribune, Aug. 2.
"LLOYD'S MAP OF VIRGINIA, MARYLAND AND PENNSYLVANIA.—This map is very large: its cost is but 25 cents, and it is the best which can be purchased."
LLOYD'S GREAT MAP OF THE MISSISSIPPI RIVER.—From Actual Surveys by Capt. Bart and Wm. Bowen, Mississippi River Pilots, of St. Louis, Mo., shows every man's plantation and owner's name from St. Louis to the Gulf of Mexico—1,350 miles—every sand bar, island, town, landing, and all places 20 miles back from the river—colored in counties and States. Price, \$1 in sheets, \$2 pocket form, and \$2.50 on linen with rollers. Ready, Sept. 20.

NAVY DEPARTMENT, Washington, Sept. 17, 1862.
J. T. LLOYD—Sir: Send me your Map of the Mississippi River, with price per hundred copies. Rear-Admiral Charles S. Davis commanding the Mississippi squadron is authorized to purchase as many as are required for use of that squadron

GIDEON WELLES, Secretary of the Navy.

3t.

CHICAGO, GREAT WESTERN AND
NORTH-WESTERN LINE—INDIANA
POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS.

CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:00 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—6:30 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Are the same and time shorter than by any other route. Baggage checked through.

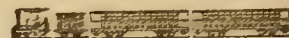
Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati Agent.

Cincinnati and Chicago Air-Line



RAILROAD.

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Through Distance 280 Miles;

42 Miles Shorter than any other Route

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M. 7:00 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without rebilling or transhipment.

JOHN BRANT, Jr., Superintendent.

C. E. POLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent.

33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON, STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Boys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and take collections.

KNOX & SHAIN, Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums 419 1 by Franklin Institute.)

T. F. RANDOLPH & BRO. Mathematical Instrument Makers

No. 67 West 6th St. bet Walnut & Vine
CINCINNATI O

BUSH & LOBDELL. Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

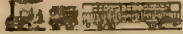
WHEELS FITTED

To Hammered or Rolled A^x

In the best Manner, at the Shortest Notice,

Most Reasonable Terms.]

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition
The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT
Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the recent *Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting WASHINGTON CITY en route*—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the **ONLY ROUTE** by which passengers can procure *through tickets and through checks to WASHINGTON CITY.*

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wcs. Ag't. Bellaire, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

**NEW YORK, BOSTON,
AND ALL EASTERN CITIES,**

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and cal. for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FOREYTH, Freight Agent, 64 Clark Street, Chicago.

ten 6. CHARLES MINOT, Gen'l Sup't

W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of
C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the highest quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no effort will be spared to give entire satisfaction in

1862. 1862.. Pennsylvania Central R. R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM

PITTSBURGH TO PHILADELPHIA

(with close connections from Western Cities.)

ALL CONNECTING DIRECT TO NEW YORK,

THROUGH PHILADELPHIA,

AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (430 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM

PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.

BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freight of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "PA. PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

J. H. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburgh.

CLARKE & CO., Transfer Agents, Pittsburgh.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

W. W. ATKMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.

CLARKE & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

G. B. NEAL, Parkersburg, Virginia.

HALL & CO., Marietta, Ohio.

H. S. PIERCE & CO., Zanesville, Ohio.

MCDOWELL & McCOLM, Portsmouth, Ohio.

R. McNEELY, Maysville, Ky.

J. P. JOHNSTON, Ripley, Ohio.

JOHN TODD, Covington, Ky.

G. L. HEATON, Cleveland, Ohio.

R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.

L. L. HOUGHTON, Gen'l Ticket Agent, Philadelphia.

H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:00 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton. RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day., Toledo & Day. Huntsville.....	5:20 P. M.	10:10 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:30 and 8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.
Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	6:00 A. M.	11:10 P. M.
Indianapolis and Terre Haute.....	6:00 A. M.	11:13 P. M.
Decatur, Springfield & Quincy.....	11:30 A. M.	3:40 P. M.
Chicago Night Express.....	6:30 P. M.	16:00 A. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	5:00 A. M.	10:05 P. M.
Seymour Accommodation.....	2:00 P. M.	1:15 A. M.
Louisville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

P. W. STRADER,
General Ticket Agent L. M. & C. X., and C. H. & D. Railroads.

W. H. L. NOBLE,
General Ticket Agent Indianapolis & Cincinnati Railroad.

E. F. FULLER,
General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT REE

NEW YORK.

ALBERT BRIDGES.

SONT

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES
Tube CLEANERS, Steel Wire and Whalebone BRUSH-

Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enamelled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warm-
ing Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Plaz-
as Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.
Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,
28 Platt Street, New York

M. W. BALDWIN & CO. ENGINEER'S

BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels Axles, Bowling or Low Moor Tire (to fit centers without bo ring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned
THEODORE DEHON,
no 1 10 Wal Broadway, New York

EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



LOCOMOTIVE & RAILROAD
CAR SPRING
MANUFACTURER,
WILMINGTON, : DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being alike on both sides, impossible to unravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.

WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

-AND-

Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Spt. 2. MOSELEY & CO.

JAMES FOSTER, Jr. & Co.,
MATHEMATICAL AND PHILOSOPHICAL INSTRUMENT MAKERS,

S.W. CORNER FIFTH AND RACE,

Cincinnati Ohio.

Drawing Instruments. Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

H. TWITCHELL.

JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co. Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase Ag. 4, m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works June 8.

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

-AND ALSO TO-

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, President.

WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1½ to 10 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from ½ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—½ to 24 inch diameter, and branches for same. &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER,
THOS. T. TASKER, JR., S. P. M. TASKER,
HY. G. MORRIS.

BUTLER'S

MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroad office for the South and West. For sale by 1,000 leading Stationers and Merchants of the South and West.

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	4.20 P. M.
Mail and Express.....	10.00 A. M.	10.30 P. M.
Columbus Accommodation.....	4.00 P. M.	10.30 A. M.
Morrow Accommodation.....	6.10 P. M.	8.00 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	7.30 A. M.	9.40 P. M.
Dayton & Sandusky.....	6.00 A. M.	6.45 P. M.
Dayton & Toledo.....	6.00 A. M.	9.40 P. M.
Richmond & Dayton.....	2.60 P. M.	6.45 P. M.
Dayton, Lima, Toledo & Hunt- ville.....	5.20 P. M.	10.10 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	{ 6.30 A. M. 8.10 A. M. 5.40 A. M.
Eastern Night Express.....	10.00 P. M.	
Sandusky, Dayton & Cincinnati—		
Morrow Express.....	6.00 A. M.	6.45 P. M.
Ball-room Accommodation.....	5.30 P. M.	10.10 A. M.
Marietta & Cincinnati—		
Mail.....	8.00 A. M.	5.20 P. M.
Accommodation.....	3.30 P. M.	10.40 A. M.
Ohio & Mississippi—		
Mail.....	5.00 A. M.	1.05 P. M.
Symour Accommodation.....	2.00 P. M.	1.15 P. M.
Express.....	5.20 P. M.	5.53 A. M.
Indianapolis & Cincinnati—		
Mail.....	6.00 A. M.	11.10 A. M.
Chicago Express.....	6.30 P. M.	10.00 A. M.
Dayton & Michigan—		
T. L. B. Detroit & Chicago Exp.....	6.00 A. M.	9.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.10 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	7.30 A. M.	9.40 P. M.
Night Express.....	7.30 P. M.	10.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morrow Express.....	10.10 A. M.	4.20 P. M.
Accommodation.....	6.40 P. M.	8.10 A. M.
Ashtabula Central— (City time)		
First Train.....	7.00 A. M.	10.45 A. M.
Second Train.....	2.00 P. M.	6.40 P. M.
The trips on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, occur by Columbus, which is 27 minutes faster than Cincinnati time.		
Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.		

\$15,427 75, as per table and report No. 3. For the further understanding of the subject, two letters of the President to Quartermaster General Meigs, marked A and B, are published with this report, the first under date of the 26th May, and the second 18th June, 1862. By reference to table No. 5, it will be seen that the earnings for transportation of Government troops has been \$106,717 04, and for the transportation of Government freights \$156,948 92. Total \$263,665 96.

These tables show the Company have received for the earnings of the year from all sources the sum of \$322,998 04, and that the cost of transportation and operating the road has been \$314,487 04, being 38 1-5 per cent. of the earnings. This is the result of the most rigid economy, and the constant working of our motive power and rolling stock.

Herewith is also published the Report of A. Fink, Esq., Superintendent of machinery and road department, with sundry tables exhibiting the operations and expenditures made in his department during the year. A careful examination of this report and the accompanying tables, will put the stockholders and the public in possession of valuable information in relation to the damage sustained by the Company, the condition of the road, the sums required to complete the road in all respects as a first class road with full equipment.

The Company had applied all their capital and credit to the construction of the road, and relied on the net earnings to pay interest and floating debt. In consequence of the seizure of so much of the road, motive power and rolling stock, and great damage to the bridges, it was necessary to restore the same in order to make it profitable.

The Company owed a large floating debt, and in the condition of the Company's affairs no further loans could be made. In this state of the finances of the Company, the President and Directors appealed to the mortgage bondholders to capitalize the interest on the bonds, and consent to the application of the surplus earnings to the restoration of the bridges, motive power, and rolling stock, and accept bonds secured by a second mortgage. The second mortgage has been executed, and a considerable part of one year's interest has been capitalized, and the work of restoring the bridges, motive power, and rolling stock, proceeded with, as shown by the tables and report of A. Fink, Esq. The work of restoring is still in progress on the faith of the net earnings.

Mr. Fink's report exhibits the actual damages sustained during the fiscal year, after deducting what has been regained, and makes the amount \$386 971 04, and shows the amount applied to reconstruction to be \$211,100 24, and that the further sum of \$175,870 80 is required to make good the damage the road sustained during the year.

The loss of revenue caused by the seizure of the road and rolling stock is estimated by Mr. Fink at \$281,336 38; but this estimate will not cover the whole loss on that account, because the continued deficiency in the motive power and rolling stock of the Company will still affect the earnings during many ensuing months.

By reference to table No. 17 of Mr. Fink's report, it will appear that besides the sum of \$175,870 80, to complete the reconstruction of the road, it will require the further sum of \$774,201 81 to complete the entire construction of the road.

The seizure of certain parts of the road, and portions of the motive power and rolling stock of the Company, referred to in supplements Nos. 1 and 2, in the last annual report, materially affected the business of the Company during the months of July, August, September, October, November, December, January, February, and March, when the road was regained in a damaged condition; but the motive power and rolling stock not all having been regained, these seizures continued to affect materially the business of the Company for the whole year, and must affect it for a considerable time to come.

It is true, the gross earnings have been increased by the transportation of Government troops and freights, to the amount of \$263,665 96, a sum insufficient to repair the damages sustained.

The Government rebuilt the bridge over the Cumberland river at Nashville, and furnished forces to guard the bridges; and the Company not having the motive power and rolling stock to do the local and Government business, were compelled, under the exigencies of the Government, to do the latter.

The President and Directors are indebted to B. Marshal, Esq., Superintendent of transportation, and A. Fink, Esq., Superintendent of machinery and road department, and their employees, for the very able, efficient, and economical discharge of the duties entrusted to them.

Very respectfully yours,
JAMES GUTHRIE, *President.*

The following is a consolidated statement of the total cost, capital and resources, of the road:

TOTAL COST.	
Main Stem.....	\$7,195,144 99
Lebanon Branch.....	1,067,593 66
Memphis Branch.....	1,126,197 28
	\$9,287,935 93
RESOURCES.	
Main Stem.....	\$350,967 31
Lebanon Branch.....	5 9 59
Memphis Branch.....	614 69
	552,131 59
	\$9,840,067 52
LIABILITIES.	
CAPITAL STOCK.	
Main Stem.....	\$4,837,365 69
Lebanon Branch.....	500 0 9 05
Memphis Branch.....	761,210 41
	\$5,858,615 05
BONDED DEBT.	
Main Stem.....	\$2,500,000 00
Lebanon Branch.....	402 100 00
Memphis Branch.....	304,600 00
	3,293,200 00

FLOATING DEBT.	
Main Stem.....	\$182,392 62
Lebanon Branch.....	327 16
Memphis Branch.....	10,075 57
	192,785 35
BANK INTEREST.	
Main Stem.....	\$93,870 00
Lebanon Branch.....	3,115 00
Memphis Branch.....	6,195 00
	103,180 00
Pay Rolls and Bills for June.....	80,240 00
PROFIT AND LOSS ACCOUNT.	
Main Stem.....	\$329,744 34
Memphis Branch.....	25,302 78
	305,047 12
	\$9,840,067 52

The following is the statement of earnings and expenses for the year:

DISTRIBUTION OF EARNINGS.	
MAIN STEM.—Passengers.....	\$94,767 27
Freight.....	34,429 12
Mail.....	21,800 00
Express.....	21,322 66
Rents.....	456 27
	\$635,715 39
LEBANON BRANCH.—Passengers...	\$35,079 24
Freight.....	30,032 89
Mail.....	3,568 00
Express.....	3,854 91
Rents.....	107 55
	79,624 59
MEMPHIS BRANCH.—Passengers...	\$28,410 78
Freight.....	23,768 65
Mail.....	3,525 40
Express.....	2,353 80
	59,458 13
	\$322,998 04

RECAPITULATION.	
Total Passengers & Freight—Main Stem and Branches.....	\$765,827 85
Mail Service.....	\$19,073 05
Express Service.....	27,531 37
Rents, &c.....	103 85
	57,170 90
Total Earnings.....	\$822,998 04
Total Operating Expenses, as per Table No. 2.....	314,404 04
Net Earnings, 61 4-5 per cent.....	\$508,591 00

The Superintendent of Machinery and Road Department gives the following summary of money expended in his Department:

The money expended for operating the road..	\$233,756 57
Amount expended for completing & equipping.....	31,63 44 9
Amount expended for re-constructing the road and replacing rolling stock.....	211,100 24
Total expenditure of this department.....	\$476,526 25

ROAD REPAIR—MAIN STEM.

(Length of Road 185 miles.)

The portion of the Main Stem, which was in the possession of the Confederate forces, is equivalent to 48½ miles for the period of one year, leaving the part operated by the Company 136½ miles. On this part of the road have been expended for ordinary road repairs \$43,854 13, or per mile of road \$321 28. For renewal of ties and iron on 185 miles, \$40,659 49, or per mile of road, \$219 78. Total, \$84,513 62, or per mile per year, \$541 06.

The following table exhibits a comparison of the cost of the Road Repairs during the last three years:

PER MILE OF ROAD PER YEAR.				
Years.	Ordinary Repairs.	Renewal of Ties & Iron.	Total.	
1859-60.....	\$470 73	\$135 00	\$605 73	
1860 61.....	339 54	48 93	388 47	
1861 62.....	321 28	219 78	541 06	
PER REVENUE TRAIN MILE.				
1859 60.....	20.23 cts.	5.80 cts.	26.03 cts.	
1860 61.....	14 57 "	2 27 "	14 84 "	
1861 62.....	19.84 "	18.34 "	38.18 "	

There have been bought, during the year, 463 tons of new iron, of which, as yet, only

227 tons have been put on the track 143 5-10 tons of iron were repaired, and 32½ tons have been re-rolled, but not yet used. Of the 227 tons put in the track, 143 tons were laid on the first thirty miles of road; 29 tons were put on the division between Green River and Barren River, and 55 tons between Barren River and Nashville. The repaired iron was used on the first thirty miles of road, where also most of the iron now on hand will be laid at once. 27,752 cross-ties have been bought during the year, of which only 13,572 were laid in the track, 12,303 on the first thirty miles, and 502 between Green River and Barren River, and 767 between Barren River and Nashville.

The following table shows the cost of engine repairs, and running expenses, consumption of fuel, &c. &c., during the last three years.

	1879	1880	1881
	TO	TO	TO
	1880.	1881.	1882.
Repairs per mile run by Engines, 4.21cts. 4.78cts. 6.93cts			
Oil and Waste.....	66 "	67 "	59 "
Fuel.....	7.28 "	6.93 "	8.61 "
Water Supply.....	1.31 "	1.02 "	1.02 "
Engineers & Firemen's Wages, and Clean. and Watch.....	5.14 "	5.15 "	5.91 "
Total per mile run by Engines.....	19.20cts.	19.49cts.	23.66cts.
Cost per mile run by Pass. Trains.....	19.79cts.	17.4cts.	21.50cts.
Cost per mile run by Frt. Trains.....	27.83 "	26.39 "	51.56 "
Cost per mile Distributing Trains.....	15.79 "	21.59 "	21.59 "
Average cost of all Trains.....	22.49 "	21.45 "	27.53 "
Engine miles run per Cord of Wood—Freight.....	29.00mils.	30.00mils.	23.72mils
Engine miles run per Cord of Wood—Passenger.....	42.80 "	43.40 "	36.20 "
Average number Passenger Cars hauled in Train.....	3.00cars.	3.50cars.	6.00cars
Average number Freight Cars hauled in Train.....	10.00 "	13.00 "	15.00 "

The following is a synopsis of the Fuel account:

Wood on hand July 1, 1861.....	25,779 50-100 cords.
Bought during the year.....	7,855 75-100 cords.
	33,635 25-100 cords.
Used on engines, and for other purposes, and lost.....	21,216 25-100 cords.
On hand July, 1862.....	12,419 60-100 cords.
The value of this Wood is—Amount paid.....	\$18,009 22
Amount to be paid ..	1,911 42
Total value of Wood on hand.....	\$19,920 64
Total Value of Coal on hand.....	65 57
Total.....	\$19,986 21

Of the 21,216 25-100 cords of Wood stated as having been used and lost, 5,952 75-100 cords were taken by the army of the Southern Confederacy, and 1,342 50-100 cords by the U. S. army, while they were encamped on the line of road. No compensation has been made to the Company for the wood so taken.

This road has suffered much from the depredations of the rebels, the estimated damage being \$386,971 04. The details of these depredations we are compelled to reserve for another issue.

SALEM R. R., N. J.—The Salem Railroad, of New Jersey, is so far completed that the cars are expected to commence running to the Woodstown station on Wednesday, the 19th of next month. Woodstown, by this arrangement, will be placed within about two hours' and Salem, three hours distance of Philadelphia. By the close of navigation it is expected the road will be completed and the cars running to Salem.

LA CROSSE AND MILWAUKEE RAILROAD.

The sale of the western section of this road to Messrs Isaac Seymour, Frederick P. James and N. A. Cousdry, included the land grant at \$100,000, the railroad and appurtenances, \$1,700,000, and the additional sum of \$300,000—making in all \$2,100,000—of which \$80,104 57 was paid in cash and the balance in mortgage bonds.

Exceptions to the sale, and motions to set it aside, were filed on behalf of the Milwaukee and Minnesota Railroad Company, the bondholders of the Helfenstein mortgage, Francis Vose, and others.

The objections to the sale of the road were sustained, the lands not having been designated by the government according to the directions of the grant of Congress.

Judge Miller, in his opinion upon the question, confirming the sale of the road, says:

To the scheme of reorganization I observe the name of Francis Vose appended as a party. It does not become him to object here to his own act, and the bill he has brought in Court can not stay the confirmation of the sale. It appears that he took an active part in prosecuting this case to a final decree without setting up his claim. He should then have done it by bill, praying a reforming or extension of the terms of the mortgage, in the alleged agreement between himself and the railroad company set forth in his bill, and they can defend against it or not, as they please.

Whether the purchasers are intending to form an association, and to connect the road purchased with the Western road, can not prevent the confirmation of the sale. I have always felt solicitous of keeping the entire road together, in due faith to the charter; but, under the legislation of the State, had no means of enforcing my wishes. The law of the State allowing the company to mortgage separate portions of the road, the Court can not refuse consent to the consummation of the contracts, or deny the right of the mortgagees to purchase the mortgaged premises. By the Constitution of the State the legislature can control the matter here complained of.

It was argued that there was no court to superintend the second adjournment of the sale. The decree was made on the 1st of January last, by the District Court having Circuit Court jurisdiction. The sale was advertised to take place in June. The Marshal adjourned the sale to the 28th of July. On the 15th of July Congress passed an act repealing the Circuit Court jurisdiction of the District Court and establishing a Circuit Court, the District Judge being made competent to hold the Circuit Court. By the act the records and papers of the District Court passed into the Circuit Court on the first day of October. The Marshal, on the 28th July, adjourned the sale on the ground, and notified it by a new advertisement. The objection is too technical. It is the same, in substance, as if the sale had been advertised in January, to take place on the second day of October.

An objection being made to the jurisdiction of the Court at this Special Term over the sale, I have concluded to defer making a decree confirming the sale of the railroad until the stated term commencing on the first Mon-

day of January next. Whether the objection is well founded or merely captious, it is not necessary here to determine, as the road is in the hands of the receiver, who could not be discharged before that time.

A decree will be prepared before January Term for the action of the Court, setting aside the sale of the lands, and confirming the sale of the road.

THE CLEARING HOUSE SYSTEM.

We conclude in this week's Journal the interesting article on the Clearing House System in England taken from Dr Lardner's valuable work on Railway Economy:

Let us now consider the manner in which these operations are effected.

The central clearing house is established in London, in a building situate near the Euston station of the Northwestern Railway. It is placed under the direction of a body of managers elected by the companies, in which each company is represented.

This central office has agents at all the stations comprised within the circles of the united companies.

In adjusting the mutual debits and credits of the companies, no company is regarded either as the debtor or creditor of any other, but the clearing house is the common creditor and the common debtor of all. We shall explain successively the mode in which each class of claim is arranged, beginning with the most important.

THE GOODS TRAFFIC AND LIVE STOCK.

From each of the 887 stations goods are, or may be, forwarded to any or all of the other 887 stations. An account of such goods, so forwarded, with the sums paid and received for each parcel, is kept at each of these stations and a copy of this account, written in *black ink*, is forwarded daily to the central clearing house in London.

In like manner, at each of the 887 stations a quantity of goods is, or may be, received daily from any or all of the other stations, an account of which is kept. A copy of this, written in *red ink*, is daily forwarded to the central clearing house in London.

The central clearing house thus receives, or may receive, 887 black and 887 red accounts daily; the black reporting all the goods that have been received at all the stations.

Now, as it is evident that the goods which are received can neither be more or less than the goods which are forwarded, the red accounts must correspond exactly with the black accounts, although the items will occur in a different order. A parcel of goods dispatched from one station must have arrived at some other, and a parcel of goods which have arrived at any station must have been dispatched from some other. Thus an entry in the black accounts must have a corresponding entry in the red accounts, and an entry in the red accounts must have a corresponding entry in the black accounts.

This is what ought to take place, supposing no error in the accounts, and no miscarriage in the transport; but in practice it is found that this perfect accordance is never realized, and that there is, upon an average, somewhere about thirty per cent. daily of entries in the one which have no corresponding entries in the other. This discrepancy arises from one of three causes, *first* from an entry being made of an object dispatched, which object has been accidentally, or, through error, mislaid; *secondly*, from an entry being omitted

of an object received, although that object may have been received; and, *thirdly*, from a miscarriage *en route*.

At the central clearing house, where the two statements of accounts, black and red, are compared, and their discrepancies detected, letters are written to such of the stations where errors have been committed, giving notice of the omission, and demanding explanation. Rectifications and explanations ensue, and the accounts are finally adjusted.

The central clearing house having opened an account with each of the companies, credits each with the sums which appear to be receivable by it from the system of accounts explained above, and debits it for the sums with which it appears to be chargeable.

At the close of each month, these several accounts between the clearing house and the companies respectively are balanced. In some of these the balances are in favor of the clearing house, in others in favor of the company; but from the nature of the transactions, these sets of balances must be precisely equal; the sum due to the clearing house by the debtor companies must be equal to the sum owing by the clearing house to the creditor companies. The debtor companies having liquidated their balances, the clearing house distributes the sum it receives between the creditor companies, in the proportion of their respective balances.

But if the debtor companies, or any of them, fail to liquidate their balances within a specified time, then the clearing house debits such companies with interest on such balance at the rate of five per cent.; and it credits those creditor companies whose balances it fails to liquidate, in consequence of such delay, with interest at the same rate. Thus the interest credits will be exactly equal to the interest debits.

PASSENGER TRAFFIC.

When passengers are booked at any railway station for any other station, they pay their full fare, and receive a stamped ticket, on which is indicated the place, day and hour of their departure, and the place of their destination.

On arriving at their destination they deliver up this ticket to the agents of the station of arrival. Carriages and horses booked are represented in like manner by tickets or checks, which are delivered up on their arrival. Parcels and baggage are entered on a way bill, in which are indicated the places of their destination, and the sums paid, or to be paid, for them.

Each station sends daily to the central clearing house a statement of the number of passengers of each class which it has booked, with their places of destination, and the sums received. It sends, also, a statement of the horses, carriages, and parcels, booked, with like particulars.

Each station likewise sends to the central clearing house all the tickets which have been delivered by passengers who have arrived there daily, as the checks for carriages and horses, and likewise a statement of the parcels and luggage which it has received.

At the central clearing house the tickets are examined and classed, and their number in the gross of each class compared with the number in the gross of the passengers who have been booked. These two ought to correspond, and any discrepancies are notified, and ultimately explained and adjusted. This operation is facilitated by a course observed in all the booking offices, in consequence of which the passenger tickets of each class are issued in numerical order, each ticket being

stamped with a separate number, and the numbers following each other consecutively for each class daily from 1 to 10,000.

The account for parcels is dealt with in a manner precisely similar to that which has been already explained in the case of merchandise.

The clearing house debits the companies respectively for the sums they have received for all these objects, and it credits them according to the stipulated rate for the mileage, embarkation, or delivery of such as have passed over their lines for such as they have booked and embarked, and such as they have discharged and delivered.

These accounts are balanced monthly, and dealt with in the same manner, exactly as has been already explained in the case of goods.

The passenger tickets, after having been duly examined and classed, so as to regulate the clearing house accounts, are returned to the companies respectively.

A separate account is kept of the government duty payable for passengers, and which, as has been observed, is exacted from the company with whom the passenger is booked, though chargeable to all the companies over whose lines the passenger is carried, in proportion to their respective mileage. The clearing house credits the company which books for the entire amount of the duty it has paid, and then debits all the companies over whose lines the passengers are carried, including the booking company itself, with their respective proportions of the duty according to the portion of the lines over which the passengers have been carried.

Although the clearing house accounts are only furnished monthly to the several companies, yet a weekly abstract of the account for the traffic in passengers and goods is sent to them respectively, to enable them to make up, as is customary, their weekly returns of traffic.

CARRYING STOCK.

The clearing house has agents posted at all the points of junction of the lines of different companies at which traffic is liable to pass from one to another. The duty of these agents is to register the number and quality of each vehicle which passes from one line to another, indicating its owner. They also register the number of the tarpaulins by which wagons are covered, and which do not necessarily constitute a part of the wagon, nor always belong to the same owners.

The clearing house agents at all the stations keep a similar register. A comparison of all these registers, copies of which are sent up to the central clearing house, enables the authorities there to trace the course of every wagon over the net-work of lines, and to ascertain its daily mileage on each line, and the time it has been detained at the stations respectively. The clearing house by these means is enabled to debit the companies respectively at a stipulated rate of mileage for the use of the wagons or of the tarpaulins, as the case may be, and to credit the companies who own the same for like sums. A statement of accounts representing the use of the rolling stock is thus opened between the clearing house and the companies respectively. In each of these accounts there appears on the credit side the sum due to the company for the use of its wagons and tenders by other companies, and on the debit side of the sums due by it for the use of the wagons and tenders of other companies upon its line. The balances of these accounts are settled monthly, and are subject to precisely the same observations as the balance of the traffic.

Finally, all questions and claims respecting lost luggage or parcels are made and arranged through the agency of the clearing house. When any parcel or other object has failed to arrive at its destination, or when any passenger misses a portion of his luggage, notice is sent to the Lost Luggage Office and the clearing house, with an indication of the route over which the passenger traveled, or the station at which the lost object was booked. A communication is immediately sent to all the stations along the line indicated, with a description of the object lost, and answers are duly received. In general the object is recovered if lost upon the road.

The enormous extent of the transactions in the settlements of which the agency of the clearing house is employed may be imagined from the following circumstances:

The number of communications made daily from the central clearing house to the provincial stations respecting errors and omissions in the reports of traffic is estimated at two hundred and fifty. The number of distinct accounts settled and balanced monthly for the goods traffic alone is estimated at about five thousand.

The monthly account furnished to each of the companies who are united in the establishment of the clearing house contains for each station of each company a statement of the weights of each object of traffic, the distances on the respective lines over which it is carried, and the expenses of its embarkation and disembarkation, and the balance on the total traffic at each station.

These monthly accounts are considered final so far as respects their settlement, and in case the companies fail to liquidate them they are chargeable with interest; but any errors or omissions which may be detected in them are corrected and allowed for in the accounts of the subsequent month.

As an example of the complexity of the accounts settled by this establishment, it may be mentioned that in the parcel department alone the majority of parcels booked are under twelve pounds weight, and the total charge for their embarkation, transmission, and delivery, frequently does not exceed four shillings. Thus, for any part of London the charge including cartage and delivery, is only one shilling, and the charge between London and the remotest part of Scotland is only four shillings. These charges have to be debited, among all the companies over whose lines and in whose wagons the object may have been conveyed. In this way one shilling has sometimes to be credited to three companies.

The principle which has been brought into successful operation in the clearing house admits of still more extensive application, which doubtless it will receive.

The practical effect of the arrangement, even as far as it is hitherto developed, is to facilitate such an interchange of the use of the rolling stock, and the service of the stations between company and company, as to render their benefits in a great degree common to all. Each company by this expedient maintains a stock not only for its own traffic, but to some extent for the traffic of other companies, and in exchange receives the benefit of the stock and stations of other companies.

The perfection to which this system tends would be, that a common rolling stock should be kept for all the companies, in support of which they should as it were club, each contributing a share to its maintenance, in proportion to the quantity of traffic transported by it.

At present the interchange is limited to the vehicles of transport, the engines of each company being confined in their movements to the lines of the company to which they belong; but there is nothing which should prevent, under proper arrangements, the same interchange of locomotive power as now takes place with so much advantage in the carrying stock.

In fine, the clearing house may ultimately grow into an establishment for the maintenance of a general locomotive and carrying stock for the use of all the railways, to be supported by the railways in common, and charged to them in the proportion in which they use it.

So far as regards the management of the traffic, there is nothing which should limit the operation of the clearing house to the railways of the United Kingdom.

By proper arrangements, the same reciprocal conveniences now obtained by the railway companies in reference to the traffic booked through, as it is technically called, might be extended to the entire continent of Europe, so that passengers or goods might be booked at any continental railway. The fare might be received on booking whether wholly or partially and might be distributed between the various lines over which the traffic should pass, in the same manner as it at present is among the railways which are united under the clearing system.

STEEL.

ITS PROPERTIES AND THE PROCESSES OF ITS MANUFACTURE.

THE INTERNATIONAL EXHIBITION.—CLASS I.—We now take up the subject of steel. Such a complete and, in some respects, marvelous series of specimens in illustration of steel has never been seen before. The opportunity of studying this collection will, it is hoped, be eagerly embraced by all who are interested or concerned in this important branch of manufacture. With a view to the instruction of the general reader, we propose, in the first place, to describe as concisely as possible the properties of steel; and, in the second place, to explain the principles of the various processes by which it is made. We have previously stated that steel is essentially iron containing carbon within certain limits, which can not be exactly assigned, but which may be taken approximately as half and one-and-a-half per cent. The characteristic property of steel is that of being susceptible of various degrees of hardness by the common and well known process of tempering. Thus, if a piece of steel be heated, say to low redness, and then rapidly cooled by immersion in water, it is rendered extremely hard and brittle; but if this hardened steel be strongly reheated and afterwards left to cool slowly, its original softness will be restored. Now, in the process of reheating, which we will suppose to be very gently and gradually affected, it will be observed that the surface of the metal will acquire a succession of well defined tints, beginning with pale straw and ending with deep blue, the former corresponding to the *lowest* and the latter to the *highest* temperature during the reheating process. If pieces of the same kind of steel be heated so as to acquire respectively this succession of tints, and then instantly plunged into water, or otherwise rapidly cooled, they will be found to possess different degrees of hardness correspond-

ing to the different tints. It is in this manner that steel is actually tempered. The philosophy of the subject is extremely interesting, but in this place can not be discussed. When we reflect that we are able by such remarkably simple means so to modify the properties of the same piece of steel as to transmute it into virtually distinct metals, as far as hardness and certain other properties are concerned, we can not fail to admire this example of the simplicity and ingenuity of nature. Steel is much more fusible than wrought iron, and may be melted in ordinary furnaces, when it is termed cast steel. Steel may be welded to steel, or to wrought iron, under suitable conditions as to quality of metal and temperature.

The fracture of steel is peculiar, and varies with the proportion of carbon and the treatment which the metal may have previously received. It is more or less finely granular, and when produced in the brittle state of the metal may be conchoidal or shell like, such as is presented by the broken surface of a lump of glass.

We pass to the consideration of the principles of the various processes employed in the manufacture of steel—a knowledge of which is essential to the right understanding of many of the articles exhibited. Still was sometimes accidentally obtained in the primitive method of extracting iron in the malleable state direct from the ore; but it would be impracticable by this method to procure steel of any degree of equality. The processes now in operation are founded on two opposite principles—namely, putting carbon into wrought iron, and taking carbon out of pig iron, it will be borne in mind, contains more carbon than steel.

Carbon is put into iron in the following ways: 1. By melting wrought iron with carbon. This is the ancient Hindoo method of preparing the ancient 'wootz.' The principle has recently been revived in this country in making the so called homogeneous metal. 2. By cementation—i. e., exposing flat bars of iron imbedded in charcoal to about the temperature of melted copper during many days. Carbon thus travels into the very centre of the bars; but how this takes place has not yet been clearly explained. This process of preparing steel is an English one; the furnaces are termed 'covering furnaces,' and the bars of steel produced are called 'blister steel,' from their being studded here and there with blister like protuberances. 3. By exposing rich iron ore to the action of reducing gases, whereby the metal is obtained in a metallic and more or less spongy state, and then melting this metallic sponge, previously impregnated with carbonaceous matters. Cast steel is thus produced, and the process is known as *Chenot's*. A well known French metallurgist had at one time an exalted notion of the value of this process, and once declared in our presence, now many years ago, that it would supersede every other, and that by its means steel might be made and sold at 40 per cent. less than Sheffield steel. There was a great hubbub about *Chenot's* process at the jury of the French Exhibition in 1855, when an attempt was made to procure for it 'la grande medaille d'or.' Twice was this refused by the jury; but after the departure of the foreign jurors, the 'grande medaille' was subsequently granted by the 'granted Presidents.'

Carbon is taken out of iron in the following ways: 1. By exposing pig iron to the action of a blast of atmosphere air at a high temperature in a charcoal hearth. 'Natural steel' is thus formed. 2. By the process of puddling, conducted so as to leave sufficient car-

bon in the iron to produce steel. Wrought iron is obtained from pig iron by puddling—that is, heating the metal in a reverberatory furnace with free access of air, and working it about until the carbon is burnt out, or nearly so. Now, if steel be only iron containing more carbon than wrought iron and less than cast iron, it is obvious that in puddling the intermediate state of steel must be passed through. But it is only recently that steel has been made by puddling, yet 'puddled steel' is now very extensively manufactured; 3. By blowing air through melted pig iron. This is the process of Bessemer, which has excited so much attention of late, and deservedly so. The carbon and silicon are readily burnt out, and a considerable quantity of iron is also oxidized, as is the case in every process in which pig iron is converted into wrought iron. What could, at first sight, appear easier than blowing air through melted iron? An idea is one thing and its realization in practice is another. Bessemer has had to contend with many practical difficulties and is entitled to great credit for the ingenuity and perseverance which he has displayed in surmounting them. This remarkable process is probably destined to effect greater changes in the manufacture of iron and steel than many ironmasters suspect or would be willing to believe. As a spectacle, there is nothing so startling and, in our view, so magnificent in the whole range of metallurgy. The melted pig iron is allowed to flow from an adjoining cupola furnace into the 'converting vessel,' which is a circular vessel of iron coated internally with a refractory lining of silica. Several jets of air are then blown in at the bottom and bubble up through the metal. For a time all goes on quietly, but the temperature gradually increases, and at length a volcanic eruption in miniature suddenly occurs, melted scoriae being projected on all sides with great violence, and which, if allowed to escape, would inflict serious mischief on any unhappy bystanders. But soon all is again tranquil, and the chamber contains malleable iron in a state of perfect liquidity. This may be tapped out into moulds, and with special precautions, drawn out into bars, &c.; but it is apt to be cellular and unsound, defects which Mr. Bessemer has had great trouble in overcoming, if even now he has thoroughly succeeded. Steel is made by introducing into the melted iron in the converting vessel a given quantity of spiegel-eisen, containing a known percentage of carbon; and so steel may be produced with any required proportion of carbon. The spiegel-eisen dissolves in the iron like sugar in water, rendering the metal more fusible and very liquid. Unfortunately, in the Bessemer process, when pig iron containing phosphorus is operated on, this injurious element is not separated in a sensible degree, as is the case in the process of puddling; so that only those varieties of pig iron which are free from phosphorus, such as hæmatite pigs, &c., can be advantageously used. The Bessemer process is now carried on by two firms at Sheffield,—his own and the Atlas works, and, if we mistake not, also in the North by the Weardale Company; and that it should have succeeded in establishing itself at such a stronghold of prejudice as Sheffield augurs well for its final success. The Sheffield, people still maintain that good steel for cutlery can not be obtained by Bessemer's process. We have made particular inquiry on this point, and have received most positive statements on the subject from some steel-makers of vast experience, who, we are sure, are not under the influence of prejudice. But all men are liable to mistakes; and time will

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	48		\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.	64	380	13,111,800	10,781,833	566,07	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do											2,700,000	6	95	1895	
do do											700,000	6	84	1880	
do do											1,125,500	6	90	1875	
do do											1,000,000	6		1867	
do Washington Branch.....	Md.	70		1,650,000							791,000	7	55	1866	
ellefontaine and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	139,12	314,090	8,795	Dec. 1860.	1st Mortgage.....	160,000	7		1870	
do do															
Buffalo and State Line.....	N.Y. & Pa.	60	68	1,950,950	1,049,000	27,51	911,019	492,047	June 30, 1860	2d "					
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,860	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	96		3,98,400	8,840,000		1,997,065	733,050	Dec. 31, 1860	1st Mortgage.....	3,700,000	6	100	1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,073,100	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7	62	1861	
do do											800,000	7	80	1864	
do do											80,000	7	64	1865	
do do											950,000	7		1865	
do do											1,300,000	7		1870	
Central of New Jersey.....	N. J.	64		2,200,000	3,180,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	105	1st 5 & 1870	
do do											600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do											1,500,000	7			
Chicago and Milwaukee.....	Wis.			No report received.							1,000,000	10			
do do											400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	104		2,897,750	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. P. Gen'l 1st Mortgage.	1,250,000	7	101	Feb & Aug 1	
do do											3,600,000	7	26	May 1.	
Chicago and Rock Island.....	Ills.	21	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	101	1870	
Chicago, Burlington and Quincy.....	"	115	138	4,089,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. P. 2d " S. P.	2,172,000	7	110	1863	
do do											813,000	7	108	1860	
do do											390,000	7		1867	
do do											363,000	7		1869	
do do											390,000	7		1864	
do do											245,000	8		1865	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	105	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do											950,000	7	100	1880	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do											532,000				
do do											104,000				
do do											305,509				
Cleveland and Mahoning	Ohio.	68		1,167,473	1,712,000	289,605	375,691	233,173	Dec. 31, 1861.	Income.....	850,000	7	80		
do do											49,000	7			
do do											341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	37	106	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L. 2d " M. L. or 1st Ex. 3d 2d Ex.	800,000	7	100	1860	
do do											1,188,000	7	90	1873	
do do											1,165,000	7		1865	
do do											1,154,000	7	75		
Cleveland and Toledo.....	Ohio.	69	143	3,343,800	3,850,670	196,413	919,971	493,956	May 31, 1861.	4th 3d Ex. 1st Mor. Jun. 1st Div.	359,000	7	10	1867	
do do											263,000	7		1872	
do do											263,000	7		1862	
do do											521,000	7		1863	
do do											293,300	7		1864	
do do											44,500	7		1862	
do do											200,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	135	135	4,746,100	510,000	4,201	1,255,003	644,888	Dec. 31, 1861.	Income.....	519,000	7	106	1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	135	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7		1861	
do do											303,000	7		1862	
Columbus and Xenia.....	Ohio.	115	54	1,490,000	290,710	50,500	See L. Miami.			Dividend.....	272,700	100		1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142									2,212,000	7			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	50	1875	
Detroit and Milwaukee.....	Mich.	186		No report							2,500,000	7	90	1875	
do do											1,000,000	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		409,702	728,853	152,694	152,392	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		96,061	1,219,100	249,68	124,110								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union											
Galena and Chicago Union.....	Ills.	85	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	400,000				
do do											18,000				
Great Western	Ills.	175		1,600,000	2,391,000		45,943	181,529	May 31, 1861.	1st Mortgage.....	1,900,000	7	104	1862 & 1863	
do do											1,200,000	7	100	May 1, 1875	
Green Bay, Milwaukee and Chicago..	Wis.	64		400,000	No report										
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573		1st Mortgage W. D. 1st " E. D.	1,350,000	7			
Hannibal and St. Joseph.....	Mo.	206		1,041,000	10,554,000	220,306	996,907	512,933	Sept. 1, 1860	Land Mortgage.....	5,000,000	6			
do do											1,300,000	6	50		
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	314,138	Aug. 3, 1861	Mortgage Conv.....	927,000	6	30	1873	
Hudson River.....	N. Y.	77	144	3,758,466	9,107,000	162,106	2,047,145	778,121	Sept. 3, 1860	1st Mortgage.....	4,000,000	7	100	1869 & 1870	
do do											2,000,000	7	103	1870	
do do											1,840,000	7	104	1875	
do do											88,000	7	103	1865	
Illinois Central.....	Ills.	80	455	15,654,900	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	12,800,000	7	100	1875	
do do											4,115,000	6	97	1875	
do do											4,270,000	7	96		
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	Debtentures.....	60,000	7			
do do											578,000	10			
Indianapolis and Cincinnati.....	Ind.	110		1,680,900	1,362,234	140,689	448,858	230,834		Income.....	38,700	7			
do do											500,000	7		1866	
do do											400,000	7	90		
Indianapolis, Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	977,952	36,773	Dec. 31, 1860.	Real Estate Mort.....	200,000	7	90		
do do											640,894	7			
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			1st Mortgage.....	314,000				
Iron.....	Ohio.	13		118,865	50,000		No report			2d "					

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Len. in of Ry. d.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st ".....	290,000	7	73	1861
do										2d ".....	392,000	7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.	90		Sold out under mortgage	2,930,000	337,632	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st ".....	250,000	7		
do										2d " Conv.....	1,000,000	7		
do										3d ".....	600,000	7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	90,000			
do										2d " E. D.	1,011,000		89	
do										1st Land Grant W D ..	4,000,000		21	
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.	20		514,433	130,000		108,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883
Little Miami.....	Ohio.	65					1,330,030	529,081	Jan. 1, 1862	City Loan.....	174,000	6		
Louisville and Frankfort.....	Ky.	63		1,169,59	334,519		245,910	98,679	June 30, 1861	1st Mortgage.....	218,000	7		
do										1st ".....	2,400,000	7		
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,034	461,970	July 1, 1861.	1st " Lebanon Br.	400,000			
do										1st " Memphis Br.	500,000			
Louisville, New Albany and Chicago..	Ind.	288		2,900,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,503	99,000	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861
Marietta and Cincinnati.....	Ohio.	203		8,561,213	196,468	108,150	433,649	78,800	Aug. 1, 1861	1st Mortgage Conv.....	2,500,000	7		1868
do										2d ".....	1,500,000	7		
do										Sterling Income.....	333,000	4		
do										Domestic.....	928,517	6		
Michigan Central.....	Mich.	91	284	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	1st Mortgage.....	467,483	6	98½	1872
do										1st " Conv.....	500,000	8	81	1869
do										1st " unconv.....	250,000	8	96	1860
do										1st " Dollar Conv.....	2,500,000	8	106	1869
do										1st " N. F. Conv.....	4,133,000	8	117	1882
Michigan South'n & North'n Indiana	Mich.&	421	246	9,018,200	9,714,764	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. S.	991,000	103		1860
do										" Nor. Ind.	985,000	100		1861
do										" Goshen Line.....	1,108,000	101		1868
do										S. F. Toledo.....	2,850,000	101		1885
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		2d Mortgage.....	2,405,000	8		1877
do										1st Mortgage.....	400,000	8		
Milwaukee and Horicon.....	Wis.	42		1,101,200						2d ".....	20,000	7		
do										1st Mortgage.....	420,000	8		
Milwaukee and Prairie du Chien.....	Wis.	34	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	2d ".....	600,000	7	102	1891
Milwaukee and Western.....	Wis.	71		No report						1st Mortgage.....	2,556,000	7		
Mississippi and Missouri.....	Iowa,	35		No report						1st Mortgage Conv.....	1,000,000	7	96	
do										2d " S. F.	400,000	8		
do										Oskaloosa Div.	1,425,000	7		
New Jersey.....	N. J.	31		4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Land Grant.....	7,000,000	7		
New Jersey Central.....	N. J.	64		2,210,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860	Mortgage.....	711,000	109		
New York and Erie Pref.....	N. Y.	19	63½	Sold under mortgage			5,590,916	1,970,400	Sept. 30, 1860	1st Mortgage.....	3,000,000	105		
do										2d ".....	4,000,000	110		
do										3d ".....	6,000,000	107		
do										4th ".....	4,900,000	101½		
do										5th ".....	1,792,500	101		
New York and Harlem Pref.....	Conn.	50	138	5,717,190	6,035,752		1,142,251	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	109½	1873
do										2d ".....	1,000,000	7	101	1864
New York and New Haven.....	Conn.	21		3,000,000	1,900,000	108,038	925,075	325,573	Apr. 1, 1861	Mortgage.....	912,000	7	94	Dec 1, 1866
do														Oct. 1, 1875
New York Central.....	N. Y.	107	556	24,000,000	14,613,005	none.	7,369,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,925,000	6	105½	May 1, 1883
do										Mortgage.....	3,000,000	7	109	June 15, 1864
Northern Central.....	Md.	138		2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,006,500	6		1885
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	500,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6		
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6		
do										2d ".....	316,955	7		
do										Construction.....	4,637,920	7		
do										Income.....	3,591,185	7		
Ohio and Mississippi, Western Div....	Ills.	148			3,292,403		No report			State Loan.....	7,000,000	6		
Pacific.....	Mo.			3,109,662	7,600,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W.	2,800,000	6		
do										Construction.....	4,500,000	6		
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,616,938	Dec. 31, 1861.	1st Mortgage Conv.....	4,900,000	6	104½	1888
do										2d ".....	2,319,000	6	98½	1875
do										2d " Sterling.....	1,957,440	6		1875
do										State Works.....	7,200,000	5	89	
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report			1st Mortgage.....	2,300,000	6	90½	1884
Philadelphia, W. and Baltimore.....	Del.	98		5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	591	467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,323	761,555	June 30, 1861	1st Mort. O. & P.	1,000,000	7	105½	1865
do										2d ".....	750,000	7	94½	1868
do										1st " O. & I.	1,000,000	7		1872
do										2d ".....	280,000	7		1873
Pittsburgh and Connellsville.....	Pa.	49		1,751,836	1,292,700	67,869	80,551	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000	7		
Racine and Mississippi.....	Wis.	164		2,705,720	1,417,910	1,085,328	220,850	68,434	May 10, 1861					
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,690	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856
do										".....	997,000	7		1866
do										".....	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	195,974	31,167	Dec. 31, 1860.	1st Mortgage.....	1,200,000	7		1886
St. Louis and Hocking Valley.....	Ohio.	56		40,975	500,000	100,000	110,200	53,100						
Springfield, Mt. Vernon & Pittsburgh.	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000	7		
do										2d ".....	450,000	7		
Steuersville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d ".....	900,000	7		1865
do										1st Mortgage Conv.....	1,000,000	7	98	1862
do										2d " Conv.....	2,000,000	7	79½	1868 & 1870
do										1st " Rel. & Ill.	517,000	7		1873
do										1st Mortgage.....	20,000	7	106	1866
Terre Haute and Richmond.....	Ind.	105	71	1,381,470	230,000	none.	377,012	216,183	Dec. 1, 1861.	1st Mortgage.....	3,100,000	7	97½	Aug. 1, 1865
Toledo, Wabash and Western.....	Ohio & Ind	35	243	2,123,500	5,996,040	54,389	433,346			2d ".....	2,500,000	7	84	Nov. 1, 1875
do										Mort. Coupons.....	98,000	7		1860 to 1865

soon show whether these gentlemen are correct or not in their judgment. It seems pre-eminently adapted for India, where suitable pig iron may be made with advantage, and where, owing to the heat of the climate, it is especially desirable to avoid the laborious work of puddling. Indeed, it is already in operation at the Porto Novo Works, Madras. Mr. Bessemer introduced his process in 1855. It was received with approbation by some ironmasters and with contempt by others. We have reason to know that certain firms wished to possess themselves of it, in order to hold it *in terrorem* over their puddlers, who have not always shown themselves either the most tractable or the most reasonable men in the world. May Mr. Bessemer live to acquire that fortune which should be the just reward of his invention; and when he has got it, may he, unlike many other successful inventors, have the wisdom to keep it!

In addition to the process last described it is necessary to mention others which are also represented in the Exhibition. There is the method of Uchatius, which consists in melting together granulated pig iron and oxide of iron, when the carbon of the former is more or less burnt out at the expense of the oxygen of the latter, with a corresponding reduction of iron. The proportions should be so regulated that sufficient carbon may be left to form steel. In another and old process scrap wrought iron is melted in admixture with pig iron. The product retains the whole of the carbon, and the relative amounts of the ingredients used must be such as to produce steel. It is requisite for this purpose that the pig iron should be of good quality, and that of British make, except the charcoal pig, is too impure. But Messrs. Price & Nicholson maintain that our refined iron is sufficiently pure to admit of its being employed with advantage in this method of making steel. It should be borne in mind that all steel, by whatever process it may have been produced, is termed *cast steel* after having been melted. The variations in quality of the different kinds of steel in commerce are innumerable, and in many cases the reasons for such variation are quite unknown. They are undoubtedly chemical, but have hitherto baffled the efforts of chemists to detect them. Much attention has, however, of late been directed to this most interesting subject, and there is now some hope that we shall not much longer remain in our present state of ignorance concerning it.

We shall consider the varieties of steel in the Exhibition in the order in which we have briefly described the principles of the various methods employed in its production.

Specimens of wootz in the usual well known little conical ingots will be found in the Indian collection, Class I; but there is nothing peculiar about them to demand more than a passing notice. Not so with regard to the so-called homogeneous metal, which has excited much attention of late. It is extremely malleable and tough and may be placed midway between wrought iron and ordinary steel; it may be regarded as steel containing a low percentage of carbon. This is the metal of which Mr. Whitworth has formed so high an opinion, and there is no doubt that it is valuable for many purposes, but it is difficult to obtain it uniform in quality. Examples of it will be found in Class 32, No. 6,456, exhibited by Shortridge, Howell & Co. Pieces of tubing formed of this metal are shown flattened down vertically, which might readily be mistaken for caoutchouc. We have not seen this metal made, but we are informed that it is produced by melting pieces of Swedish iron and carbonaceous matter. In the specifica-

tion of a patent, No. 2,369, A D 1856, it is stated that scale, which falls off from steel or iron during the process of hammering or rolling is employed in addition to the ingredients in common use for cast steel. Now, if any one will take the trouble to refer to Mushet's *Papers on Iron and Steel* (1840, p. 525), he will find a description of a metal which exactly applies to the so-called homogeneous metal. The process of manufacture appears to be essentially the same, and was patented by Mushet in 1800 (No. 2,447), who is reported to have sold the patent to a house in Sheffield for the sum of £3,000. At the present time the subject is one of no small importance to our practical workers in iron; and, as many of them may not be aware that homogeneous metal was manufactured so long ago, we subjoin an extract from Mushet's work:

'When iron is presented in fusion to 1140th or 1150th part of its weight of charcoal, the resulting product occupies a kind of middle state betwixt malleable iron and steel. It then welds with facility, and, provided the precaution formerly mentioned is attended to, may be joined either to iron or steel at a very high welding heat. Thus combined to carbon it is still susceptible of hardening a little, but without any great alteration in the fracture. It possesses an uncommon degree of strength and tenacity, [and is] capable of an exquisite degree of polish, arising from its complete solidity and the purity of fracture conveyed to it by fusion.'

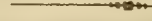
If that be not 'homogeneous metal' we know not what is. In these days, when patent monopolies beset us on every side, it is desirable that the utmost publicity should be given to facts such as we have just recorded. Why, the zincing of iron, or, as it is grandiloquently called, 'galvanizing,' which has been the subject of more than one recent patent, and, of course, of much litigation, was practiced in France about the year 1740, precisely as it is done at this day; and a description of the process was given by Bishop Watson in his well known and widely circulated *Chymical Essays*, published towards the end of the last century. And many other instances might be mentioned of old inventions having been monopolized by modern patentees.

Examples of steel produced by the cementation process will be found in the British and several of the foreign departments; but there is nothing requiring particular comment under this head. Until recently all the steel at Sheffield was made by this process, and Swedish iron has been largely consumed for the purpose. Different varieties of iron are known to yield different qualities of steel, but the knowledge respecting these differences is generally regarded as a trade secret. The prices of Swedish iron vary considerably. Thus, No. 72 in the catalogue sells at £32 per ton; No. 50, at £21 per ton; No. 64, at £16 per ton; No. 49, at from £12 to £14 per ton. No. 21 bar iron is well adapted for gun barrels, and No. 64 for card wire. The Swedish ironmasters affect much secrecy, especially with each other, regarding the prices at which they dispose of their iron. We regret that Sheffield is very inadequately represented in the present Exhibition. We miss the names of some of the chief firms, such as those of Sanderson, Jessop, &c. The reason assigned for this is, that sufficient space could not be obtained to enable them to do justice to themselves, and they declined to exhibit at all. There were 170 applicants for space, but half of them withdrew on finding that suitable accommodation could not be granted. This is a serious matter for Sheffield. She no longer

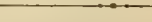
maintains her boasted pre-eminence, even in common articles of cutlery—such as table-knives, in which she is beaten hollow by the French, and this, too, it is said, with steel of her own manufacture imported into France. In surgical instruments she is also signally defeated by the same invading foe. Before the Exhibition she scouted the idea of a rival; but her eyes are now opened, and we have the best authority for stating that she feels her humiliation, and is resolved to amend her ways. In these days of fierce and incessant competition, a manufacturer must not commit the folly of relying upon a reputation buried in the grave of his ancestors. There are energetic and enterprising men in Sheffield, of whom not the least is the present Mayor, whose magnificent rolled armor plates we have previously pointed out as among the most remarkable objects in the present Exhibition. Nor should we omit to mention as worthy of special praise the firm of Naylor, Vickers & Co. It is due to the Mayor to record the fact that he has acted in the most liberal manner to foreign jurors and others in granting them free access to his works, where they have witnessed the Bessemer process on a great scale. Those gentlemen have expressed themselves in terms of warm admiration at their reception, and have returned home with recollections of the Mayor of Sheffield which will not be readily effaced.

Chenot's process has been tried in several localities, and has not, we hear, been found successful in a pecuniary point of view, notwithstanding the brilliant auspices under which it was ushered into the world. There was a great display of the *eponges metalliques* in the Exhibition of 1851; and in the present Exhibition various products are exhibited by the Brothers Chenot, in the French Department, No. 14.

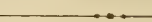
To be Continued next week.

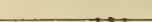
 The Chicago and North-Western Road will be completed to Green Bay next week.

 NEW HAVEN, NEW LONDON & STONINGTON R. R.—The Coupons of the first and second mortgage bonds New Haven, New London & Stonington Extension Railroad, due 1st prox, will be paid by M. Morgan and Son 37 William street.

 LONG ISLAND R. R.—The coupons due November on the seven per cent mortgage bonds of the Long Island Railroad will be paid at the Bank of the State of New York.

 HUDSON RIVER R. R.—It is stated that the Hudson River Railroad Company are about to declare three per cent. in cash and seven per cent. in stock. The charter authorizes \$4,000,000 capital, but not more than \$3,800,000 has been issued.

 CLEVELAND & TOLEDO R. R.—The junction bonds of the Cleveland and Toledo Railroad due November 1, will be paid at the office of Vermilye and Co. 44 Wall street.

 ENGLISH R. R.—In 1861 the whole length of English railway was 6,690 miles of double line and 3,743 miles of single.

MONETARY & COMMERCIAL.

The business of the past week has been active but quiet. We have no very startling changes to record. Gold fluctuates but slightly from our average quotations of last week, while there is a slightly downward tendency in stocks. Exchange has been dull and lower. We quote as follows:

	Buying.	Selling.
New York.....	1/2 dis.	par
Philadelphia.....	1/2 dis.	par
Boston.....	1/2 dis.	par
Gold.....	98 to 20 prem.	par to 31 to 32.
Silver in quarters and larger pieces 23 to 24 prem.		" 27
Demand Notes.....	24 to 25 prem.	" 27

Legal tender notes are abundant and are becoming the favorite currency of the whole country. The issues of the Treasury amount to an average of about \$600,000 per day, on which from 150 to 175 engravers' presses are kept busy. The great want of the community at the present moment is abundance of postage currency for change. Thirty thousand dollars is all that has been received in Cincinnati for about three weeks, since the distribution of the \$8,000. This is plainly a mere bagatelle. The necessities of this city are fully ten times that amount. New York is receiving about \$40,000 every other day and Cincinnati, with fully one fifth the population of New York, has received in all only \$55,000, and a portion of this was distributed to paymasters in the army. We submit that this is an unfair arrangement and that the Western cities should receive their fair share of the issues of the small change.

The inactivity of the armies of the Union during all the fine weather of the fall is a source of constant and unceasing complaint. Many of our contemporaries are commenting severely upon the government, and some are predicting further rises in the price of gold and silver. *Thompson's Reporter* of New York City thus hits off the whole subject:

In general business we notice considerable activity. Mercantile houses are receiving and forwarding goods at a lively rate. The low stage of water in the river is forcing large quantities of freight over the railroads, and is also keeping back produce and other articles. If this state of things continues there will be another coal famine here this fall.

Flour is fluctuating. Superfine closes at \$5 100/100 25. Extra at \$5 40, and fancy at \$5 600/100 75. Wheat is quoted at \$1.00 for red and \$1.12 for white. Corn sells readily at 45c for old. Oats are quoted old at 50c, new at 48c. Rye 63c. Barley steady at \$1.20 (a) 1.35. Whisky 34c.

Of the hog trade the *Price Current* says:

"Dealers are realizing more fully the uncertainties which beset the trade in pork the present season, and caution is taking the place of the strong competing spirit displayed a week or two ago, and the consequence of this is that hogs are being offered freely for November and December, at \$1.60 to 1.65, without finding buyers, whilst, a week or so

ago, the reverse was the case, and it would be difficult to get over \$4.60 for the present month, and \$4.50 for December. The weather was too warm for curing, the fore part of the week, but was cool enough since Sunday, and slaughtering has been again resumed, and \$1.50 was the price paid on the spot yesterday, and the same rate was obtained for 700 head for the last half of December.

There have been sales of new green meats at 3c for shoulders and 5c for hams and sides the last day or two, and new lard is taken at 9c, but for future delivery it would not bring over 9c."

The great sensational fever at the East is the pirate "Alabama." The *New York Tribune* says:

If we were a jurymen making up a verdict on the causes of the present premium on gold, we should go to work about as follows:

Absence of generalship in the army.....	7 1/2
Scandals among the contractors.....	2 1/2
Rodriguez, negligence etc. among Q. Ms.....	1 1/2
Defalcations of all grades.....	1 1/2
Delays in collecting the internal revenue.....	1
" paying the soldiers.....	2
Quarrels among officers, military.....	2 1/2
" " civil.....	1 1/2
Jacobins all round the board.....	4
Party before country.....	2 1/2
The President minus Jacksonism.....	7 1/2

Grand total..... 31

We do not look upon it that the Board of Brokers had one half as much to do with the price of gold, as the least of the above causes; still the Brokers, out of regard to public opinion, are the first to reform. Will gold rise or fall? This depends upon whether the sins of omission and commission are to be removed.

"Freights are quite unsettled, owing to the further "brilliant" operations of the Rebel craft "290," in the destruction of some three millions dollars worth of British property, which conclusively proves that British Consulate certificates are of no avail against this pirate vessel, which was built, fitted out, and even manned in England, for the purpose of destroying American property on the high seas; but contrary to expectations, the intended stiletto has penetrated the hearts of her Royal Majesty's own subjects. The five and three dollar certificates of the British Consul at this Port consequently were of no avail before the pirates that commanded and manned the Alabama. Hence underwriters' rates have advanced materially, but are very irregular.

—The following is a statement of coal transported on the Delaware and Hudson Canal:

	1862. For the week ending Oct. 18.	1861. For the season.
Del. and Hudson Canal Co.....	24,410	461,396
Penna. Coal Co.....	20,272	406,000
Total tons.....	44,682	931,436

For the same period last year:

	1861. For the week.	1861. For the season.
Del. and Hudson Canal Co.....	25,000	621,219
Penna. Coal Co.....	19,895	572,501
Total tons.....	44,895	1,193,720

—The business of the Philadelphia and Reading Railroad Company for the month of Sept. was:

Received from coal.....	\$311,721 52	\$162,139 97
" " m'chandise.....	33,500 01	32,185 55
travel etc.....	49,222 68	39,216 52
Total.....	\$443,994 22	\$231,456 14
Transportation, roadway dump- age, renewal fund, and all charges.....	178,105 89	128 029 96
Net profit for the month.....	\$270,888 33	\$110,825 68
" previous 9 months.....	1,232,181 00	1,023,696 43
Total net profit 9 mos.....	\$1,529,969 33	\$1,134,521 51

—The Michigan Southern Road earned the third week in October:

1861.....	\$58,362
1862.....	6,228
Increase.....	\$17,866

—The Cleveland and Toledo Road earned the third week in October:

1861.....	\$30,533
1862.....	23,95
Increase.....	\$2,942

—The Galena and Chicago Road earned the third week in October:

1861.....	\$76,105
1862.....	30,763
Decrease.....	\$5,312

—The treasurer of the Rome, Watertown & Ogdensburg Railroad Company gives notice to the bondholders that the 3 per cent Government tax deducted from coupons due September 1st, 1862, will be refunded at the agency of the company, on presentation of the bonds.

—The Michigan Central earned the same week:

1861.....	\$62,721 43
1862.....	72,189 40
Increase.....	\$9,467 97

—The following is a statement of coal transported on the Delaware and Hudson Canal:

	1862. For the week ending Oct. 25.	1862. For the Season.
Delaware and Hudson Canal Co.....	26,735	492,131
Pennsylvania Coal Co.....	6,762	472,01
Total tons.....	33,497	964,932

—For the same period last year:

	1861. For the Week.	1861. For the Season.
Delaware and Hudson Canal Co.....	25,336	64,005
Pennsylvania Coal Co.....	19,864	558,862
Total Tons.....	45,200	1,193,970

—The Milwaukee and Prairie du Chien Road shows a decrease of \$5,400 for the third week of October.

—The earnings of the Buffalo, New York and Erie Railroad Company, for the year ending September, 1862, are as follows:

1862.....	\$32,537 52
Earnings same period 1861-62.....	593,844 62
Increase in 1862.....	\$228,762 90

—The Rock Island Road earned the third week in October:

1861.....	\$39,233
1862.....	42,765
Increase.....	\$2,412

CENTRAL R. R., N. J.—The coupons on the second mortgage bonds of the Central Railroad New Jersey, due November 1, will be paid at the office of the company, 69 Wall street, N. Y.

The stockholders of the Rock Island Road are making inquiries as to the prospect of a dividend in January. The annexed figures will show substantially the condition of the property.

Earnings April 1 to Dec. 1 1862.....\$954,750
Leaving net..... 429,515
Cash items April 1, 1862..... 325,775

Apparent assets Dec. 1, 1862.....\$755,290
Chargeable with:
July 9, 1862, interest.....\$48,895
3 @ cent divid'd. 184,090
Aug. 12, 1862 rent B. Valley..... 62,510 — 279,495

Leaving for stock interest and rents accruing.....\$475,775
Interest due Jan. 9, 1863.....\$48,895
Rent due Jan. 31, 1863..... 62,500 — 111,395

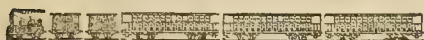
Remaining for stock.....\$254,380

After providing for the payments on the first of 1863, without counting in two month's earning (\$230,000.)

The following dividends are announced to be paid in New York City:

CHI., BURLINGTON & QUINCY R. R.—The Chicago, Burlington and Quincy Railroad Co. will distribute to the stockholders standing on the books November 1, on the 15th of November, one share of new stock for every five shares of the old held. Fractions will be settled for in cash at the rate of \$100 per share. This is to represent the undivided earnings of the previous four years. At the same time a dividend will be paid of four dollars per share free from government tax, in cash, from the net earnings of the past six months. The transfer books will be closed from the evening of the 1st to the opening of business on the 16th of November.

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\$20,000 to engrave it and one year's time.
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Antietam Creek, Sharpsburg, Maryland Heights, Williams-
port Ferry, Rhotersville, Noland's Ford, and all others on the
Potomac, and every other place in Maryland, Virginia and
Pennsylvania, or money refunded.
Price 50 cents.

From the Tribune, Aug. 2.

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but 25 cents, and it is the best which can be purchased."

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Mississippi River Pilots, of St. Louis, Mo., shows every
man's plantation and owner's name from St. Louis to the
Gulf of Mexico—1,350 miles—every sand bar, island, town,
landing, and all places 20 miles back from the river—color-
ed in counties and States. Price, \$1 in sheets, \$2 pocket
form, and \$2.50 on linen with rollers. Ready, Sept. 20.

NAVY DEPARTMENT, Washington, Sept. 17, 1862.
J. T. LLOYD—Sir: Send me your Map of the Mississippi
River, with price per hundred copies. Rear-Admiral
Charles S. Davis commanding the Mississippi squadron is
authorized to purchase as many as are required for use of
that squadron.

GIDEON WELLES, Secretary of the Navy.

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apolis, Lafayette and Chicago, connecting at Chicago with
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leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:0 A. M.—Indianapolis, Lafayette,
Springfield, Quincy, Palmyra and St. Joseph Express ar-
rives at Indianapolis, Lafayette, Springfield, Quincy,
Palmyra, St. Joseph, Atchison, K. T. at 1:50 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20
P. M.

THIRD TRAIN—6:30 P. M. Chicago Express for In-
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all Western and North-western Trains.

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General Ticket Agent.

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Passenger or Baggage Cars, in less time and at lower speed
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Freight trains leave at 6:00 P. M., and run directly
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In the best Manner, at the Shortest Notice,

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Every article necessary to drill the TUBE-PLATES and to set the TUBES
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In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

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Wrought Iron Welded Tubes—from 1/2 inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas, Water, or other purposes, and fittings of every kind to suit the same.

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Gas Works Castings, etc., etc.

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, NOVEMBER 13, 1862.

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WRIGHTSON & CO.,

Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7 00 A. M.	4 20 P. M.
Mail and Express.....	10 00 A. M.	10 30 P. M.
Columbus Accommodation.....	4 00 P. M.	10 30 A. M.
Morrow Accommodation.....	6 00 P. M.	8 00 A. M.

Cincinnati, Hamilton & Dayton—

Cin. & Chicago Air Line.....	7 30 A. M.	9 40 P. M.
Dayton & Sandusky.....	6 00 A. M.	6 45 P. M.
Dayton & Toledo.....	6 00 A. M.	9 40 P. M.
Richmond & Dayton.....	2 00 P. M.	6 45 P. M.

Dayton, Lima, Toledo & Huntsville—

ville.....	5 20 P. M.	10 10 A. M.
Cin. & Chicago Air Line Exp.....	7 00 P. M.	10 10 A. M.
Hamilton Accommodation.....	7 00 P. M.	6 30 A. M.
Eastern Night Express.....	10 00 P. M.	8 10 A. M.
		5 40 A. M.

Sandusky, Dayton & Cincinnati—

Morning Express.....	6 00 A. M.	6 45 P. M.
Bellevue Accommodation.....	5 20 P. M.	10 10 A. M.

Marietta & Cincinnati—

Mail.....	7 40 A. M.	3 50 P. M.
Accommodation.....	3 50 P. M.	9 45 A. M.

Ohio & Mississippi—

Mail.....	5 00 A. M.	10 05 P. M.
Express.....	5 00 P. M.	5 53 A. M.

Indianapolis & Cincinnati—

Mail.....	6 00 A. M.	11 10 A. M.
Accommodation.....	11 30 A. M.	3 40 P. M.
Chicago Express.....	6 30 P. M.	10 00 A. M.

Dayton & Michigan—

Toledo, Detroit & Chicago Exp.....	6 00 A. M.	9 40 P. M.
Toledo & Chicago Express.....	5 20 P. M.	10 10 A. M.

Cincinnati & Chicago Air Line—

Mail and Express.....	7 30 A. M.	9 40 P. M.
Night Express.....	7 00 P. M.	10 10 A. M.

Cincinnati, Wilmington and Zanesville—

Morning Express.....	7 00 A. M.	4 20 P. M.
Accommodation.....	6 00 P. M.	8 00 A. M.

Antusky Central— (City time)

First Train.....	6 30 A. M.	10 45 A. M.
Second Train.....	2 50 P. M.	6 44 P. M.

The trains on the Little Miami and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

GENERAL O. M. MITCHELL.

The news of the death of the distinguished gentlemen whose name heads this article, flashed over the country like an electric shock. General Mitchell's name was as familiar to our readers and the country at large as a household word. His previous eminence in whatever he undertook to perform, had led the country to form great expectations of his military career. But at the very commencement of his usefulness he is suddenly cut off and falls a victim to the yellow fever.

General Ormsby McKnight Mitchell was born in Union County Ky. on the 28th of August, 1810. His early years were devoted to the acquirement of as good an education as his time and opportunities, well improved, afforded. When but twelve years old, he entered active life as a clerk in Ohio. In 1825 he received the appointment as cadet in the West Point Military Academy, and in 1829 he graduated, being fifteenth in his class of 46. In the same class were the rebel generals Robert E. Lee and Joseph E. Johnston. After his graduation he served two years as assistant professor of mathematics in the Military Academy. He next turned his attention to law and was admitted to the bar, and practiced as a lawyer in Cincinnati until 1834, when he was elected professor of mathematics, philosophy and astronomy in the Cincinnati College. From this position he was called in 1836, to perform the duties of Chief Engineer on the Little Miami Railroad, and was closely identified with the early history of this road. In 1845 he proposed the establishment of the Cincinnati Observatory; and it was wholly due to his energy and perseverance that this project was carried out. It was here that General Mitchell first became so generally known as a man of great energy and high scientific attainments. He was subsequently interested in the construction of the eastern division of the Ohio and Mississippi Railroad, and was identified with its early history. He was, however, so deeply interested in his favorite science of astronomy, as to be unwilling to withdraw many years from its pursuit. In 1859 he was elected Director of the Dudley Observatory at Albany, New York. On the breaking out of the rebellion, he offered his services to the government and from the date of his appointment as Brigadier General of Volunteers, in August, 1861, he devoted his time and energies to the service of his country.

As a soldier, General Mitchell was active and energetic. The history of his western campaign is one of continued success. With a comparatively small force, he penetrated beyond Nashville through Tennessee into Alabama, and with a quick forethought seized the railroad at Huntsville, and thus destroyed the rebel line of communication between Corinth and Richmond. From the scene of his suc-

cesses he was recalled to Washington and finally placed in command of the department which was established on the eastern coast of the Carolinas and Georgia. Here, in the midst of the most active preparations for a Fall campaign, he fell a victim to the yellow fever—dying with his harness on.

Few men have made a higher mark or left a brighter name than General Mitchell. As an astronomer he had reached the highest round. And as a military commander his energy and activity was winning laurels which will never fade. His name is still revered among his Western veterans, and was like a Talismanic word among the Eastern troops that he commanded for so short a time.

LOUISVILLE AND NASHVILLE R. R.

In our last we gave the annual report of the directors of this company on the general business of the road. Notwithstanding all the interruptions of business the company made net earnings of \$508,591, a sum more than sufficient to pay up the interest on its bonded and floating debt and the whole amount of back interest. This road, next to the Baltimore and Ohio Railroad, has been one of the greatest sufferers by the war. A great portion of its line was for a long time in the hands of the Confederates and much of its rolling stock was carried off by them and permanently lost to the company. Under the head of *Reconstruction*, the Superintendent of the road gives the following statement of the lines.

On the 4th of July, 1861, the authorities of the State of Tennessee seized the trains on the Tennessee part of the road, and from that time until February last, that part of the road was therefore not operated by the company. An estimate of the value of the movable property then seized was submitted and is printed in the last annual report.

Part of this property came again into the hands of the company last February, after the Southern forces had left the line of the road. An estimate of the value of the property which has not been returned, and of the damage done to returned property, is given in detail in the first column of statement XIX. and amounts to \$64,882.44.

On the 17th of September, 1861, the forces of the Southern Confederacy took possession of the southern part of the road, and came up as far as the Rolling Fork River, and burned the bridge over that stream. The only part of the road which at that time could be operated by the company was from Louisville to Rolling Fork, 30 miles, and from Lebanon Junction to Lebanon, 37 miles, making a total of 67 miles.

On the 18th of September, the Federal forces advanced to the Rolling Fork bridge. This bridge consisted of two spans 200 feet each, crossing the river at an elevation of 65 feet. The erection of a temporary tressel

work was commenced on the 20th and trains passed over it on the 2d of October.

The Federal forces had in the mean time advanced to a point near Elizabethtown, 40 miles from Louisville, and the trains commenced to run to that point. The Confederate forces had fallen back to Green River, and in their retreat had destroyed the bridges over Nolin River, the tressel on miles 57 and 61, and the bridge over Bacon Creek. The bridge over Nolin River consisted of three spans of 60 feet each of iron superstructure, with wooden chord and one span of tressel work. The bridge was rebuilt on the 17th of October, the same as it was before. The iron work, although considerably bent by the fire and fall, could be used again. The tressel on miles 57 and 61, and the bridge over Bacon Creek, were rebuilt before the Federal forces advanced to these points, and the latter bridge was destroyed a second time, on the 8th of December, before our forces reached it. On the 1st of December, a freshet carried away part of the tressel over Rolling Fork. It was made again passable for the trains on the 12th of the month. In rebuilding the tressel work, an opening of 60 feet was spanned by a truss, and in order to pass the driftwood through it, booms were laid from each side of the opening to the shore. The tressel has since stood a succession of freshets, some rising as high as 40 feet, and carrying an immense amount of driftwood, which was all safely passed through.

After Rolling Fork bridge was repaired, during which time the Federal forces had advanced to Green River, Bacon Creek bridge was rebuilt a second time, and completed on the 12th of December.

The bridge over Green River is 1,000 feet long, and consists of five spans of iron superstructure, crossing the river at an elevation of 115 feet.

In anticipation of an advance of the Federal forces in October, which did not take place before the middle of December, the Confederate forces had destroyed the two southern spans of the bridge, by blowing up the southern pier, which was 90 feet high. The second pier from the south, had been mined, and an attempt made to blow it up too, but fortunately it did not succeed. The two spans which were destroyed are, in the ordinary stage of the river, over dry land, and a tressel can be kept up there without any danger of its being reached by the current or driftwood even in high stages of water.

The clearing away of the wreck was commenced on the 17th of December, and the tressel work, 390 feet long and 100 feet high at the highest place, was ready for the passage of trains on the 8th of January.

The Federal forces did not advance beyond Green River until the 12th of February, when they commenced to march toward Bowling Green and Nashville, and the road south of

Green River passed again into the hands of the company.

The condition of the road below Green River was as follows.

The depots at Rowlett's, Horse Cave, Woodland, Cave City, Glasgow Junction, Rocky Hill, Oakland, Bowling Green, and Woodburn, were burned. Also the machine shop and engine house at Bowling Green, and the water station at Prewitt's Knob.

The track was destroyed between mile 77 and 81, in ten different places, by piling cord wood on the track, setting it on fire, thus burning the cross ties and bending the rails. Between mile 81 and 87 the track was not injured, but between mile 87 and 91, three and three quarter miles of track had been torn up the cross ties burned and the rails bent.

On the last day of February the track was repaired and the road in running order to Barren River.

The day before the Federal forces reached Barren River, the bridge over that stream, consisting of two spans of iron superstructure, crossing at an elevation of 60 feet, was entirely destroyed, by blowing up the stone pillars on which the superstructure rested.

The continuation of high water in Barren River, made it impossible to commence as early as was desirable the construction of a temporary bridge. The first tressel was raised on the 14th of March, when the work was again interrupted for a week by a freshet, thus delaying its completion until the 8th of April. The tressel work had to be built on a sharp curve, so as to avoid the wreck of the iron bridge, which could not be removed during the high stage of water.

The only bridges destroyed on the main stem, south of Bowling Green, were Dry Creek bridge, nine miles north of Nashville, the bridge over Morgantown pike and Cumberland River bridge, at Nashville. The former was a wooden truss of 85 feet span. A tressel was erected over this stream at once, and since then it has been replaced by a permanent structure. The bridge over Morgantown pike has been tresselled. The bridge over Cumberland River was a wooden structure of two spans of 200 feet, and two draw spans each of 120 feet opening. This bridge has since been built by the United States Government, and was completed on the 11th of June.

On the Memphis Branch of the road, the bridges over Whippoorwill and Elk Fork had been destroyed.

On the road south of Bowling Green was found a part of the rolling stock of the company, and some of the cars of southern roads, which were left in the hurry of the retreat. Cars and engines were in a dilapidated condition. Wrecks, which had accumulated during the administration of the road under the Southern Confederacy, were strewn along the road at all points. Of the sixteen engines

taken from us, ten were recovered. Five of these were at the time undergoing repairs at the Bowling Green shops, and were in the fire when the engine house and machine shop were burned, but were not materially injured. One of the engines was on the south side of Cumberland River, one was lying in the Cumberland River, having been run off from the draw bridge, a third one was wrecked on the road, leaving two only available for service. They were made use of to run a daily train between Bowling Green and Edgefield, opposite Nashville, before Barren River Bridge was completed, and the rolling stock of the northern end could be brought into service. The track between Bowling Green and Nashville was found in a very bad condition. Little or no work had been done on it during the administration of the road under the Southern Confederacy. On the 15th of March the train ran off the track ten miles north of Nashville; and when the only remaining engine south of Bowling Green was sent with the workmen to remove the wreck, it was captured by Morgan, who suddenly made his appearance at Gallatin, twenty-six miles in the rear of the Federal army, which was then at and south of Nashville. Morgan damaged the engine, burned thirteen cars on the Gallatin siding, and burned the water house and wood sawing and pumping machinery. This put a stop to the operation of the road between Bowling Green and Edgefield, until the completion of Barren River bridge, on the 8th of April, when, for the first time since July 4th, 1861, the trains ran through from Louisville to Edgefield.

On the 12th of April, the water station at Buck Lodge was destroyed by fire, supposed to have been the work of some citizens in the neighborhood.

After the completion of the Barren River bridge on the 8th of April, the bridges on the Memphis branch, at Whippoorwill and Elk Fork, were reconstructed. Whippoorwill bridge consisted of one span of 60 feet, an iron superstructure with wooden chord. The iron work was not injured, and the bridge was easily repaired. Elk Fork bridge consists of four spans of 75 feet, resting upon iron piers 50 feet high, the same kind of superstructure as Whippoorwill. The two end spans were down, and the iron work of the two others was suspended from the piers, the wood work having been burned. The iron piers were displaced, but not injured. This bridge was restored to its former condition on the 9th of May, when, for the first time since the 17th of September, 1861, the trains commenced to run to the State line, the terminus of the Memphis branch.

On the 11th of May Morgan again appeared with a small force at Cave City, 100 miles north of Nashville, and captured a freight and passenger train, destroying 37 freight cars (twenty-seven of which belonged to the

company), and three passenger cars. Since that time, up to July 1st, no further damage has been done to the road by Confederate forces.

Statement XIX contains an estimate of the damage done by the seizure of July 4th, September 17th, 1861, and May 11th, 1862; and the amount expended for reconstructing and restocking the road. In the estimate of September 17th, is included all the damage done to the road from that day to the 15th of March, 1862, including Morgan's first raid on Gallatin.

The loss in rolling stock sustained during the year has been:

6 locomotives lost and 10 damaged; 14 passenger cars lost; 3 baggage cars lost; 142 box cars lost; 30 flat cars lost.

Statement XX contains a detailed statement of the amounts expended during the year, to restore the company's property:

132 box cars have been built in the company's shop; 8 new passenger cars have been bought; 4 new passenger cars are in course of construction in the company's shop; 2 new baggage cars are in course of construction in the company's shop; 5 locomotives have been bought and repairs done on the ten damaged engines.

Of the depot buildings destroyed, the following were rebuilt: Rowlett's, Horse Cave, Cave City and Woodburn. At Bowling Green a new building is in course of erection, and nearly finished.

The engine house at that place is also being rebuilt. The money expended on these several works is shown in detail in statement XX and amounts to \$211,100.24.

Of the bridges destroyed, the following have been restored to their former condition:

Nolin, Bacon Creek, Whippoorwill, Elk Fork, Dry Creek, and Cumberland River bridges.

One span of the Barren River bridge is nearly completed. The second span, which, in the ordinary stage of the river, is over dry land, need not be rebuilt at once. The wrought iron work of the destroyed bridge is used again in the new one.

The total amount expended for reconstruction up to the 1st of July (See statement XX) is.....\$211,100.24
The estimate of damage done (See statement XIX), is.....386,971.04

Remains to be expended.....\$175,870.80

The length of the part of the road seized on July 4th and September 17th, and the time it was kept from the control of the company, will appear from the following statement;

SEIZURE OF JULY 4TH, 1861.

From the 4th of July, 1861, to 4th of March, 1862 the road from Franklin to Nashville..... 51 miles.

SEIZURE OF SEPT. 17TH, 1861.

From Sept. 18th to Oct. 20, the road from Lebanon Junction to Franklin, and from Memphis Branch Junction to State line..... 154 miles.
From Oct. 20 to Dec. 13th, from Nolin to State line and Franklin.....131½ "
From Dec. 13th to Feb. 17th, from Green River to State line and Franklin..... 111 "

From Feb. 17th to M'ch 1st, from Prewitt's Knob to State line and Franklin..... 98 "
From M'ch 1st to April 9th, from Barren river to State line..... 51 "
From April 9th to May 11th, from Allensville to State line..... 7 3-10 "

Computing from the above data, the length of road which was in possession of the Confederate forces, and the time it was kept by them, it will be found that by the seizure of July 4, a part of the road equivalent to 34 miles, and by the seizure of September 17th, equivalent to 37½ miles, together making 71½ miles, were taken from the control of the company for a period equivalent to one year. Of these 71½ miles, 23 miles belong to the Memphis Branch.

By taking as a basis for calculation the net revenue of the part of the road seized on the 4th of July, during the ten months preceding the seizure, and making no allowance for the loss of revenue on the road from Bowling Green to Franklin, which became almost useless to the company after the seizure of July 4th, we find the loss of revenue to be.....\$90,013.44

By taking as a basis for calculation the net revenue earned on the part of the road seized September 17th, for the two months preceding the seizure, the loss of revenue from that seizure is.....146,522.50

During the months of May and June, the company could not do all the business which offered, for want of rolling stock. The estimated loss of revenue caused by the retention of the cars and engines during the months of May and June, is.....34,338.18

The interest due on the money expended in reconstructing the road, not including the interest on the rolling stock, for which the loss of revenue had already been estimated.....1,562.29

Total loss of revenue.....\$281,336.38
Loss of and damage done to company's property, as shown in statement XIX.....386,971.04

Total loss sustained by the company during the year.....\$668,307.42

BOSTON & MAINE R. R.

The following is the annual report of the President and Directors of this Company:

The gross revenue from all sources for the year ending May 31, 1862 is.....\$732,427.64
The expenditures of every kind, including depreciation of locomotives and cars, the renewal of rails, ties, &c., is.....442,021.14

Net earnings.....290,406.50
Two dividends, of 3 per cent each, being deducted.....249,342.00

Leaves a balance undivided of.....\$41,064.50

It is a matter of regret that we are unable to present a more favorable exhibit of the results of the past year. The cause of this unfavorable condition of things is national, and beyond our control. But it is none the less real—none the less disastrous—because without remedy.

The same cause which has operated unfavorably on our road has had a contrary effect on those roads which are made channels of communication between the large cities and Washington.

Ours is a road dependent more upon its local than foreign business. Of the staple products of the country, very little comparatively, passes over it, except what is consumed in the manufacturing, mechanical, and other industrial pursuits along its line.

In consequence of the great scarcity of cotton, that branch of manufacture has furnished much less transportation than usual. Whenever the business of the country shall have resumed its former condition of growth and prosperity a more favorable statement may be expected.

We would remark here, that from the operation of causes, which may prove temporary, the business of the current year, since May 31st, has proved much more satisfactory than during the corresponding period of the last year.

The particulars of the operations of the road for the past year, and also its present financial condition, may be ascertained by examining the various tables in the Appendix. They have been prepared with great care and labor, by the Treasurer, in compliance with your standing votes on the subject.

In former years, we have received considerable sums of money from the surplus earnings of the Portland, Saco & Portsmouth Railroad. The same causes, which have unfavorably affected our road, have had a similar effect upon that road. We have had no call upon us to supply funds for the guaranteed dividends, and probably shall not be called upon for that purpose. But, until more prosperous times, we can not reasonably expect any considerable revenue from that source.

The steamer Daniel Webster, in which this Corporation has an interest, was chartered by the National Government for the purposes of the war, about six months since. It is still retained by the Government. The company owning the steamer will probably receive more under the present contract than she would have earned on her usual route between Portland and Bangor. But her place has not been supplied by any other boat; and the travel, formerly accommodated by that line, has been compelled to adopt another channel of intercourse, possibly to the detriment of the lines of road between Portland and Boston.

By examining the statement of undivided earnings for several years, it will appear that the amount has steadily increased. That amount, however, is not invested in cash or cash assets. This will appear from the following statement:

The amount actually received from sale of 41,557 shares of capital stock is \$4,076,974.52.

Upon that number of shares dividends were declared in 1850, and there has been no change since.

The construction accounts, showing the cost of the road and equipment, as will appear by the same table, amount to \$4,292,938.64, consequently the sum of \$215,964.12 more than was received from the sale of shares has been expended in constructing and equipping the road.

The available assets of the corporation, of all kinds, amount to.....\$612,774.20
Deduct from this sum the ascertained liabilities, as by same table.....199,821.32

This balance being.....412,952.88
Together with the above sum of.....215,964.12

Makes the sum of.....628,917.00

Which is the amount of undivided earnings. In other words, of the sum of \$628,927.00,

which is the amount of the undivided earnings, as before stated, \$215,864 12 is invested in the construction and equipment of the road; and the balance, being \$412,962 88, is invested in items of property after deducting from their sum total the ascertained liabilities.

It also appears by the same table, that the corporation owes only one note of \$22,000 00, balance due for land purchased in Boston. This note will become payable Oct. 1 next, and can then be paid without any inconvenience, from the money of the Treasury.

Our liability on account of the Newberryport Railroad, last year, was \$72,239 20. It is now only \$4,140,000, and that is not on interest.

Notwithstanding we have so largely reduced our indebtedness during the past year, we have, at all times, been able to meet the legitimate demands upon the treasury, without hiring money. Thus it appears that, while our financial condition has been easy, there has been but little surplus of money idle in the treasury.

The gross receipts for the last year are less than the previous year by.....\$197,723 67
The expenses are less by the sum of..... 87,707 31

Making the net receipts.....\$110,016 36 less than the former year. This is more than two dollars and a half per share of the capital stock issued.

In the ordinary repairs of the road, about 40,000 cedar ties have been put in place during the past year. The average number for the past seven years has been about 35,000, at an expense of eleven thousand dollars annually. In addition, there is an expenditure of something less than one thousand dollars annually for chestnut switch ties. We have in our road bed, including all the branches, side tracks, &c., now operated by us, not far from 400,000 ties. Their cost, at thirty-two cents each, would amount to \$128,000 00. Should the life of a cedar tie be reckoned at ten years on this road, there will be required an annual outlay of \$12,800 00 to purchase the necessary ties. This may be considered a fair estimate at the prices heretofore paid. For the last five years the expenditure for iron rails has been on average, \$20,332 annually. From this statement it will be seen that the expense of the ties is, comparatively, a large item in the repairs of the road.

In the past, as in previous years, it has been the purpose of your directors to keep the bridges, tracks, rolling stock, and station buildings in thorough repair. No expense has been spared to accomplish this object. Whatever would conduce to the safety or comfort of the traveling public has been cheerfully granted.

On the 21st of September last, the Directors passed the following vote:

"Voted, that from and after the 30th day of September inst., in consequence of the

depressed state of the business and diminished income of the Railroad, a deduction of 10 per cent be made from the salaries and monthly payments of all officers and employees of the road, whose annual salaries or wages exceed two hundred dollars, until further order of the Board."

This reduction commenced on the first day of October, and still continues in operation.

We have heretofore expressed to your entire confidence in the comparative value of your property. That confidence is not the least diminished. Whenever the great industrial pursuits of the country are prosperous, you may safely calculate upon generous returns from your investment. Respectfully submitted,

By order of the Board of Directors.

F. COGSWELL, *President.*

Boston, August 13, 1862.

GREAT WESTERN RAILROAD OF ILLINOIS.

We are in receipt of the annual report of this company to its stockholders for the year ending March 31, 1862. This road extends from the State Line of Illinois and Indiana to Naples, 174½ miles, and in connection with the Quincy and Toledo Railroad, and the Logansport Peoria and Burlington Railroad, forms the Southwest line from Toledo to the Mississippi River at Burlington and Quincy. From the Report of the Directors it appears that the earnings and expenses of the past year have been as follows:

EARNINGS.

From Passengers.....	\$213,050 76
" Freight.....	326,638 66
" Mail and baggage.....	27,939 18
" Rent of cars, &c.....	24,180 32
	\$591,408 92
Operating expenses.....	321,840 35
Net earnings.....	\$269,568 57

Of this there was expended for construction as follows, viz:

For grading.....	\$3,621 10
For bridging and masonry.....	6,334 86
For fencing.....	1,585 89
For right of way.....	290 00
For new buildings, water works, &c.....	1,327 93
For locomotives.....	18,783 96
	\$31,963 74

Net earnings after deducting amount expended for construction.....\$237,604 83

The ratio of operating expenses to earnings was 54.42 per cent, as against 62.64 per cent. the previous year.

The earnings and expenses for the past three years, ending March 31 each year, have been as follows:

	1860.	1861.	1862.
Gross earnings.....	\$433,366	\$485,943	\$591,408
Operating expenses.....	307,302	304,414	321,840
Construction.....	21,688	18,693	31,963
Net earnings.....	104,375	162,835	237,604

The number of miles run by locomotives for three years was as follows, viz:

	1859-60.	1860-61.	1861-62.
For passenger trains.....	219,224	223,491	157,600
For freight trains.....	114,818	119,125	222,640
For other trains.....	19,568	14,178	24,460
	353,610	367,594	404,700

In addition to the above, locomotives were run, during the last year, 23,065 miles on connecting roads.

It will be seen that the increase over the previous year of gross earnings was \$105,465 47, of net earnings \$880,039 61, of operating expenses \$17,425 86, and that the increase of net earnings, after deducting construction expenses, was \$74,769 70.

The earnings per mile run by all trains was \$1 46 1-10 cents, against \$1 32 2-10 cents the previous year; and the expenses per mile were 79½ cents, against 82.8 cents the previous year; net gain per mile run 17.2 cents.

NUMBER OF LOCOMOTIVES AND CARS.

Locomotives.....	20
First class passenger cars.....	11
Second class passenger cars.....	3
Mail and baggage cars.....	7
Carbide cars.....	6
Box cars.....	242
Live stock cars.....	104
Platform and coal cars.....	120

Length of road from State Line to Naples.....	174 ½ miles.
Length of Meredosia branch.....	5 ½ "
Length of side tracks.....	14 3 "
Total length of track.....	194.3 "

We have endeavored to keep the road and its machinery in safe and efficient condition. No passenger was injured, notwithstanding a great many troops were carried, by day as well as by night, who would not submit to ordinary restraint.

There was a considerable increase in the cost of repairs of road and bridges. Over 78,000 sleepers were purchased, and also more new rails, spikes and chairs than in any previous year. Over 400 lineal feet of new truss bridges were built, and thoroughly covered and painted.

Other truss bridges were repaired, as also were trestle bridges, and some of the latter sort rebuilt.

The total earnings on freight account have been as follows:

FREIGHT EARNINGS.

Local freight.....	\$ 26,075 92
Joint freight.....	223,170 71
Military freight.....	16,982 03
Total.....	\$366,238 66

The division of passenger earnings have been as follows:

PASSENGER EARNINGS.

Local passengers.....	\$ 84,045 32
Joint ".....	6,934 98
Military.....	59,761 75
Commutation and extra baggage.....	307 71
Total.....	\$213 050 76

The income account for the past three years has been as follows:

INCOME ACCOUNT.

	DR.
For claims against the old company paid per requirements of the new charter, same being for taxes, land damages, labor and cattle damages.....	\$ 29,546 75
For amount expended for construction.....	73,345 63
For amount expended for operation of road.....	933,557 63
For amount interest paid on bonded debt to date.....	457,612 95
For balance down, being net assets as shown by schedule.....	164,213 93
	\$1,657,316 53

	CR.
By wood, shop materials and sundry assets on hand April 1, 1859.....	\$146,960 66
By freight earnings to date.....	773,578 98
By passenger earnings to date.....	618,940 50
By mail service to date.....	54,125 00
By express freight to date.....	25,407 93
By rent locomotives and cars.....	36,129 53
By miscellaneous receipts to date.....	173 54
	\$1,657,316 53
Balance March 31, 1862.....	161,253 93

The officers of the company are:

Directors, J. N. A. Griswold, New York; L. M. Wiley, New York; E. T. H. Gibson, New York; F. T. Frelinghuysen, New York; Wm. A. White, New York; George Griswold, New York; L. Tilton, Springfield, Ill.; Jas. L. Lamb, Springfield, Ill.; James Dunlap, Jacksonville, Ill.; President, L. Tilton, Springfield, Ill.; Superintendent, F. W. Bowen, Springfield, Ill.; Secretary, Wm. B. Corneau, Springfield, Ill.; Treasurer, George Griswold, New York; Transfer Agent, E. T. H. Gibson, New York; Office in New York 54 William Street.

The capital and debts of the company are as follows:

Capital stock.....	\$1,500,000
1st mortgage bonds.....	1,000,000
2d mortgage bonds.....	1,350,000

There is no floating debt, which is a very excellent feature in the condition of any road. The net earnings of the road for the year will be seen to be equal to 6 per cent. on a capital of \$3,500,000 or a little less than the whole amount of capital and funded debt.

STEEL.

ITS PROPERTIES AND THE PROCESSES OF ITS MANUFACTURE.

(Concluded from last week.)

Natural steel continues to be produced on the Continent. The Imperial Works, in the Austrian Department, No. 66, which are the most renowned for the production of Styrian steel, exhibit natural steel and cast steel made from it. They manufacture neither puddled nor cement steel. Specimens of natural steel will be found in the Italian Department, Nos. 52-71. It is derived from spathose ores, and is produced by the method known as the Bergamasque. The manufacture of puddled steel is now largely developed on the Continent; but in Great Britain it has not yet made much progress. Mr. Clay, of the Mersey Works, was the first to introduce it successfully into this country. We have seen it made within the last three years in South Wales. Considerable skill is required in the management of the process, and under any circumstances it is difficult, not to say impossible, to produce steel of uniform quality, even in the same operation. In the Austrian collection are numerous examples of puddled steel, among which may be mentioned the following; No. 3, Count Meran's Ironworks, Krems, Styria, interesting from having been produced with raw lignite as fuel, which contained 25 per cent. of water and much ash; No. 35, Francis Mayr's works, Leoben, Styria. The examples of this kind of steel are so numerous in some of the foreign departments that to enumerate them is quite out of the question. In Prussia the manufacture of puddled steel is largely carried on, and examples of the metal, especially in the form of rail sections, are shown

in the Zollverein collection. We may notice the puddled steel of the Limburg Company, Westphalia (No. 779), as puddled steel was first made in Germany at these works. The steel is reported to be of excellent quality. In the Swedish Department, Zethelius (No. 69), exhibits puddled steel, produced with wood as the fuel.

We now arrive at the consideration of one of the most extraordinary and most important collections in the Exhibition, the like of which has never previously been witnessed; we allude to the truly magnificent display of Krupp's cast steel. The special points of interest are the wonderful soundness and the enormous size of the castings; and in these respects he is so far in advance of all other producers of cast steel that it will be extremely difficult to approach, much more to overtake him. Krupp affects considerable mystery in his process. He rejoices in astonishing the world by the magnitude of his operations; and, like many others, who have far less reason for self-gratulation, he is not inaccessible to the charms of popular applause. He has printed a handsome series of plates of various objects of his manufacture, which is prefaced by four photographic views of his works in Essen. They are evidently of large extent, and are reported to occupy, one way or other, 180 acres of ground. It is stated that he employs puddled steel, which is broken up, assorted, and re-melted in crucibles. This variety of steel does not appear to be adapted for cutlery. He consumes all the spiegeleisen produced by Musener & Co. It is affirmed that there is a great consumption of plumbago and leather parings at the Essen Works. Each crucible is said to contain 70 lb. of steel, and the furnaces in which they are heated vary much in dimensions, the smallest holding two and the largest 24 crucibles. When a large casting is required, the organization has been carried to such a remarkable degree of perfection that at a given signal all the crucibles needed are ready to be taken out of the furnace at the same time. Their contents are poured with the utmost rapidity into a large reservoir, and from this the metal is cast. By this means, as in bronze-founding on the large scale, homogeneity is attained. The apparatus for working the steel is the most gigantic yet constructed. There is a steam-hammer weighing 50 tons. The anvil face weighs 185 tons, and cupola furnaces were built expressly to melt this large quantity of metal. The largest casting in the world is the great bell at Moscow, reported to weigh 192 tons; but it cracked in cooling, and was never removed from its birth-place. Krupp's anvil rests on eight blocks of cast iron, weighing from 125 to 135 tons each, and making a total weight of 1,250 tons of cast iron! This solid structure of iron is supported on a wooden foundation, 40 feet square. The mould for casting steel solid should be constructed so as to avoid the presence of all angles, of which the inevitable effect would be to cause a lodgment of the air, and consequent unsoundness, due to bubbles. Vent holes will not suffice to remedy this evil, as they become so soon stopped up by the rapid solidification of the steel that the air has not time to escape. The largest casting exhibited by Krupp in 1851 weighed 2½ tons, and the largest in the present Exhibition weighs 21 tons. It is in the form of a solid cylinder, about 9 ft. high and 3 ft. 8 in. in diameter. It has been broken across to show fracture. We have inspected the fractured surface over and over again, even under a good lens, and we have failed to detect a

single flaw. The largest casting Krupp ever made weighed 25 tons. Now, when we reflect that this enormous mass of metal is melted in comparatively small crucibles, we get an idea of the perfect organization requisite to have every crucible ready and the pouring effected at almost the same moment of time; and it is in this organization that we are disposed to think one great merit of Krupp consists. A large rectangular ingot, weighing 15 tons, is exhibited; it has been broken across in eight places to show uniformity of quality and structure; it was cast cylindrical, and reduced afterwards under the hammer to the rectangular shape. Krupp exhibits shafts, rolls, railway tires and wheels, locomotive axles, and guns. There is a good catalogue in German, illustrated with a photograph of the various objects in the collection, and there is also a price list of the cast steel guns. A finished gun of eight inches calibre, turned, bored, and rifled, without breech closing apparatus, is advertised at £975. Among the plates in the large series previously referred to we notice drawings of locomotive axles supplied to some of our largest railway companies, and crank axles of marine engines supplied to some of our most celebrated marine engine-makers. We congratulate Krupp on the pre-eminent position which he occupies in the world as the producer of the largest and soundest castings in steel, though not on the site which he occupies in the Exhibition. Whose fault is this? But tallow, toys, and sweetmeats evidently stand high in the estimation of Her Majesty's Commissioners. In the vicinity of Krupp's works is the smaller establishment at Bochum. We are informed that the processes here adopted are the same in all respects as at Krupp's and the access to the works is liberally granted by the proprietors. The large steel bell, not far from Krupp's collection, was cast at the Bochum Works. Steel can not be compared with bell metal for the quality of sound, but is a cheaper material.

Bessemer makes an admirable display, and has certainly no reason to complain either of want of space or of obscurity of position—an exceptional case. He exhibits both iron and steel produced by his process, and specimens illustrative of the quality of the metal, as shown by hammering, punching, bending, twisting, stamping, rolling, drawing into tube and fine wire, turning, polishing, &c. A rail is shown, 84 lb. to the yard, which may be supplied at £13 per ton. The tensile strength of the Bessemer steel is great, and the metal is now obtained of very uniform quality. Out of 28 pieces taken in random in one establishment, the extreme of difference in tensile strength was about 5 lb. or so. We have already said so much about the Bessemer process that nothing need be added. It is certainly destined to play an important part in the world, and the inventor has reason to rejoice at the success which he has achieved, though he never received a professional education according to the orthodox notions of existing ironmasters. In the French Department, Jackson, Son & Co. (No. 4) exhibit steel objects made by the Bessemer process. The Swedes have sent both iron and steel made by this process. The large tire is of Bessemer iron. Bessemer steel will be found under the following numbers; No. 31, Kloster Works, Dalecarlia. At these works are the largest charcoal blast furnaces in Sweden, each producing about 100 tons of pig iron weekly. No. 73, Carlsdal Works, Nericia. No. 75, F. Goransson, Gefle, who was the first to introduce the process into Sweden. Many

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	48		\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.	64	380	13,111,800	10,781,833	566,07	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling.	3,000,000	5			
do do										Mortgage.....	2,500,000	6	95	1885	
do do										"	700,000	6	84	1880	
do do										"	1,125,500	6	90	1875	
do do										"	1,000,000	6		1867	
do Washington Branch.....	Md.	30		1,050,000						"	751,000	7	55	1866	
Bellevue and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	139,120	314,090	8,795	Dec. 1860.	1st Mortgage.....	160,000	7		1870	
do do										2d "					
Buffalo and State Line.....	N.Y. & Pa.	60	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000	6	100	1864	
Camden and Amboy.....	N. J.	96		3,798,400	8,880,000		1,997,063	733,950	Dec. 31, 1860.	1st Mortgage.....	450,000	7	62	1861	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	800,000	7	80	1864	
do do										2d "	800,000	7	80	1865	
do do										3d "	950,000	7	64	1865	
do do										4th "	1,305,200	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	100	1865 & 1870	
do do										2d "	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d "	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	1,000,000	10			
do do										2d "	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F.	1,250,000	7	101	Feb. & Aug 1	
do do										Gen'l 1st Mortgage.	3,600,000	7	59	Feb. & Aug. 1	
do do										2d "	3,000,000	6	26	May 1.	
Chicago and Rock Island.....	Ills.	82	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	8	103	1870	
Chicago, Burlington and Quincy.....	"	115	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	110	1863	
do do										2d "	813,000	8	108	1860	
do do										1st Mor. Chi. & Aur.	399,000	7		1867	
do do										2d "	303,950	7		1869	
do do										1st "Cent. Mil. Tract	391,000	7		1864	
do do										2d "	245,000	8		1868	
Chicago, Iowa and Nebraska.....	Ind.	82		No report											
Cincinnati and Chicago Air Line.....	Ind.														
Cincinnati, Hamilton and Dayton.....	Ohio.	105	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	950,000	7	100	1860	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
Cleveland and Mahoning	Ohio.	68		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,509	7	80		
do do										1st Mortgage.....	850,000				
do do										2d "	499,000	7			
do do										3d "	344,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	42	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7	96	1873	
do do										3d 2d Ex.	1,165,000	7	81	1865	
do do										4th 3d Ex.	1,154,000	7	75		
Cleveland and Toledo.....	Ohio.	69	148	3,343,800	3,850,670	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	359,000	7	103	1867	
do do										1st " " 2d Div.	263,000	7		1872	
do do										2d " " "	265,000	7		1862	
do do										1st " Tol. Nor. & Clev	521,000	7		1863	
do do										2d " " "	293,300	7		1864	
do do										Junction Income.	44,500	7		1862	
do do										C. & T. Income.	300,000	7		1864	
Cleveland, Columbus and Cincinnati.	Ohio.	136	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000			1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	135	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	106	1861	
do do										2d "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	115	54	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700	100		1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.											
Dayton and Michigan.....	"	142		2,176,666	2,512,000	292,207	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
do do										2d "	2,212,000	8			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	50	1875	
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000	7	90	1875	
do do										2d "	1,000,900	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		986,061	1,219,100	249,868	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.											
Galena and Chicago Union.....	Ills.	85	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	400,000				
do do										2d "	180,000				
Great Western	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage.....	1,993,000	104	1862 & 1863		
do do										2d "	1,520,000	100	May 1, 1875		
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report					1st Mortgage W. D.	1,041,000	10			
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573		1st " E. D.	1,350,000	7			
Hannibal and St. Joseph.....	Mo.	206		1,041,028	10,354,000	220,336	996,907	512,933	Sept. 1, 1860.	Land Mortgage...	5,000,000	6			
do do										Mortgage Conv.....	1,354,000	50			
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1866	1st Mortgage.....	927,000	6	30	1873	
Hudson River.....	N. Y.	75	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	110	1860 & 1870	
do do										2d S. F.	2,000,000	7	103	1870	
do do										3d "	1,840,000	7	101	1875	
Illinois Central.....	Ills.	80	455	15,654,980	13,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000			1863	
do do										Construction.....	12,853,400	7	100	1875	
do do										"	4,115,000	6	97	1875	
do do										Debentures.....	42,740	7	96		
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000				
do do										2d "	578,000	10			
do do										Income.....	38,700	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,659	448,858	230,834		1st Mortgage.....	500,000			1866	
do do										2d "	400,000				
do do										Real Estate Mort.....	200,000				
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,036	277,952	36,773	Dec. 31, 1860.	1st Mortgage.....	649,984	7	90		
do do										2d "	314,000				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report								
Iowa.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotations of Stock.	Len. of R.R.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st ".....	290,000	7	75	1861
do										2d ".....	392,000	7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,632	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st ".....	250,000	7		
do										2d " Conv.....	1,000,000	7		
do										3d ".....	600,000	7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.....	904,000		89	
do										2d " E. D.....	1,000,000			
do										1st Land Grant W D.....	4,000,000		21	
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report		June 30, 1861	1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.	29		514,433	130,000		104,944	43,267	Jan. 1, 1862	1st Mortgage.....	1,300,000	6		1863
Little Miami.....	Ohio.	65					1,330,030	529,981	June 30, 1861	City Loan.....	174,000			
Louisville and Frankfort.....	Ky.	65		1,169.59	384,519		245,910	98,679		1st Mortgage.....	218,000			
do										1st Mortgage.....	2,000,000	7		
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.....	400,000			
do										1st " Memphis Br.....	500,000			
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	606,000	7		1861
Marietta and Cincinnati.....	Ohio.	208		8,561,213	196,468	108,150	430,649	76,800	Aug. 1, 1861	1st Mortgage Conv.....	2,500,000	7		1868
do										2d ".....	2,000,000	7		
do										3d ".....	1,500,000	7		
do										Sterling Income.....	333,000	4		
Michigan Central.....	Mich.	90	284	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	Domestic.....	928,617	6	98½	1872
do										1st Mortg. Sterling.....	467,489	6	84	1869
do										1st " Conv.....	500,000	8	84	1860
do										1st " unconv.....	250,000	8	86	1869
do										1st " Dollar Conv.....	2,598,000	8	106	1869
do										1st " S. F. Conv.....	4,153,000	8	115	1862
Michigan South'n & North'n Indiana	Mich &	42½	246	9,018,200	9,714,764	437,886	2,075,450	1,039,829	Mar. 31, 1861.	Mort. Mich. So.....	991,000		108	1860
do										" Nor. Ind.....	985,000		103	1861
do										" Goshen Line.....	1,168,000		100	1868
do										S. F. Toledo.....	2,850,000		101	1865
do										2d Mortgage.....	2,465,000	93½		1877
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d ".....	20,000	7		
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8		
do										2d ".....	600,000	8		
Milwaukee and Prairie du Chien.....	Wis.	34	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	103	1891
Milwaukee and Western.....	Wis.	71		No report										
Mississippi and Missouri.....	Iowa.	55		No report										
do										1st Mortgage Conv.....	1,000,000	7	96	
do										2d " S. F.....	400,000	8		
do										Oskaloosa Div.....	1,425,000	7		
do										Land Grant.....	7,000,000	7		
New Jersey.....	N. J.	34		4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000		109	
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.					
New York and Erie Pref.....	N. Y.	90½		Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860	1st Mortgage.....	3,000,000		106	
do		63½								2d ".....	4,000,000		110	
do										3d ".....	6,000,000		167	
do										4th ".....	4,900,000		100	
do										5th ".....	1,792,500		100	
New York and Harlem Pref.....	Conn.	50	138	5,717,190	6,055,752		1,142,851	433,716	Sept. 30, 1860.	1st Mortgage.....	2,950,000	7	109½	1873
do		21								2d ".....	1,000,000	7	105	1864
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	7	94	Dec. 1, 1866
do										".....	978,000	6	105½	Oct. 1, 1871
New York Central.....	N. Y.	104	556	24,000,000	14,613,005	none.	7,309,042	2,661,132	Sept. 30, 1861	Cons. Cert. to St. H.....	7,925,000	6	109½	May 1, 1881
do										Mortgage.....	3,000,000	7	109	June 15, 1861
Northern Central.....	Md.	138		2,260,000	5,800,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,006,300	6		
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,450,000	6		
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,560			
do										3d ".....	316,995			
do										Construction.....	4,637,920			
do										Income.....	3,591,183			
Ohio and Mississippi, Western Div....	Ills.	148			3,292,403		No report							
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000			
do										" S. W.....	2,800,000	6		
do										Construction.....	4,500,000	6		
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.....	4,900,000	6	104½	1888
do										2d ".....	2,319,000	6	96½	1875
do										2d " Sterling.....	1,957,440	6		1875
do										State Works.....	7,200,000	5	89	
Penn and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report							
Philadelphia, Wil. and Baltimore.....	Del.	98		5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6	99½	1884
do										Improvement.....	119,000	6		1863
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	53	467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,323	761,555	June 30, 1861	1st Mort. O. & P.....	1,000,000	7	105½	1865
do										2d ".....	750,000	7	92	1866
do										1st " O. & F.....	1,000,000	7		1872
do										2d ".....	380,000	7		1873
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.....	500,000			
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.					
Sandusky, Dayton and Cincinnati. ..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	121,000	10		1856
do										".....	997,000	7		1866
do										".....	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,285,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1866
do				40,000	500,000	100,000	110,200	53,100						
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000			
do										2d ".....	450,000			
Steuensville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d ".....	900,000	7		1865
do										1st Mortgage Conv.....	1,000,000	7	98	1862
do										2d " Conv.....	2,000,000	7	79½	1863 & 1870
do										1st " Bel. & Ill.....	517,000	7		1873
do										1st Mortgage.....	200,000	7	106	1866
do										1st Mortgage.....	3,400,000	7	98½	Aug. 1, 1865
do										2d ".....	2,500,000	7	80½	Nov. 1, 1878
do										Mort. Coupons.....	94,440	7		1890 to 1863

difficulties had to be encountered, and great expense incurred. Goransson is reported to have effected several improvements. No. 56, Siljansfors Ironworks, Dalecarlia. The process has not yet made its way into Austria. The Prussians have tried it but failed, and assign as the reason the unsuitable quality of the pig iron employed.

The process of Uchatius excited some attention a few years ago, especially in London. It has been tried but not adopted in this country, for two reasons—first, the difficulty of obtaining uniform results; and, secondly, the high cost. Samples, however, of Uchatius steel are exhibited in the Swedish Department, No. 65, Ulf, Dalecarlia. This steel, strange to state, finds a ready sale at prices ranging from £50 to £60 per ton, which are higher than can be obtained for Bessemer steel in Sweden. It is said to be specially good for sword blades. It is made by melting Bispberg iron ore, mixed with charcoal, in Belgian crucibles. This ore is remarkable for its purity.

Cast steel made by melting together wrought iron and charcoal pig iron is shown in the Swedish Department, under No. 50, Rettig, Gefle. Cast steel, made by melting together wrought iron and refined pig iron, is exhibited by Dr. Price, No. 256, in the British Department, Class I. It is maintained that coke pig iron may be sufficiently freed from silicon and certain other impurities by the refining process as to admit of being employed with advantage in the manufacture of this kind of steel. There may be more in this method than is now supposed.

In the Austrian collection are specimens of the so-called Wolfram steel, made by melting together cast steel and the mineral wolfram. The quality of the metal, it was believed, would be much improved by this addition. It breaks with a very fine grain, and is hard and tough. We have learnt on excellent authority that this alloy has not been found successful. We know that a year or two ago some Vienna wolfram steel was submitted to trial by one of the first Sheffield steel makers—a man quite free from the charge of prejudice—and he reported unfavorably concerning it. At present we hear much of the value of titanium and other elements in steel. We have examined this subject with particular care, and have failed to discover satisfactory evidence of the good effects attributed to the presence of such foreign matters.

In the Austrian Department are drawings of Mayr's furnaces for casting steel on Siemens principle; and we particularly recommend them to the attention of our steel makers. The drawings will explain themselves to those persons who understand Siemens' 'regenerative furnaces,' of which excellent models are exhibited in the Machinery Annex. A description without drawings would be of no avail. Lignite is the fuel used, of which three parts by weight are required to melt one of cast steel. In six days between five and six tons are melted in one of these furnaces. Siemens' furnace is evidently founded on philosophical principles, and is, we believe, destined to play an important part in various metallurgical and other operations.

We have now completed our review of the smelting and manufacture of iron throughout the world, so far as they are represented in the present International Exhibition. We have earnestly striven to mete our justice with an impartial hand, neither fearing to censure nor being reluctant to praise. Great Britain has come out nobly, notwithstanding

the absence of many of our leading ironmasters. We will not inquire further into the reasons of this indifference. Those who have exhibited are entitled to the gratitude of those who have not. Sweden amply sustains her long established reputation. Prussia and Nassau have much distinguished themselves. Austria deserves great praise, especially for the liberality and freedom with which she has communicated information. Belgium might have done better. Russia has done well. Italy gives proof of vigorous rejuvenescence. France, remarkable to say, has not even attempted to do justice to herself. Spain presents a melancholy spectacle, thanks to somebody or other. Canada has covered herself with honor. The United State are nowhere. Australia has revealed all her treasures, and excited the envy of the world.—*London Times*.

A TABLE FOR THE CONVERSION OF AVOIRDUPOIS OUNCES INTO TROY OUNCES.—The recent act of Congress imposing a tax of 3 cents on every Troy ounce, over 40, of silver plate used by families or individuals renders a table similar to that given below useful and convenient. It is, however, greatly to be regretted that the tax had not been assessed, on the common, or avoirdupois ounces, and thus the first step would have been taken to do away the absurdity of the duplicate systems of weights or measures, which has been tolerated too long. By an act of the British Parliament, which we believe has been adopted in this country, a pound (16 ounces) Avoirdupois contains 7,000 grains, and a pound (12 ounces) Troy 5,760. In an ounce Avoirdupois there are, therefore, 437½, and in an ounce Troy 480 grains, or an ounce Avoirdupois is equal nearly to 11-12ths or 0.9114583 of an ounce Troy, and 40 ounces Troy are equal to 44 (43,885) ounces Avoirdupois, as follows:

Avoirdupois.		Tax.
44 ounces are equal to 40 Troy ounces.....		\$4.00
50 do.....	45 6	0.17
60.....	54 7	0.44
70.....	63 8	0.71
80.....	72 9	0.99
90.....	82 0	1.26
100.....	91 1	1.53
110.....	100 3	1.81
120.....	109 4	2.08
130.....	118 6	2.35
140.....	127 6	2.63
150.....	136 8	2.90
160.....	145 8	3.17
170.....	154 9	3.45
180.....	164 1	3.72
190.....	173 2	4.00
200.....	182 3	4.27
250.....	227 3	5.64
300.....	272 3	7.01
350.....	317 3	8.37
400.....	362 3	9.74
450.....	407 3	11.10
500.....	452 3	12.47
550.....	497 3	13.84
600.....	542 3	15.21
650.....	587 3	16.58
700.....	632 3	17.94
750.....	677 3	19.31
800.....	722 3	20.67
850.....	767 3	22.04
900.....	812 3	23.41
950.....	857 3	24.78
1000.....	902 3	26.14

On gold plate no allowance is made, but every Troy ounce is taxed 50 cents; hence the tax on one ounce of Avoirdupois of gold plate is 45½ cents; on ten ounces Avoirdupois it is \$4 56; and on one hundred ounces Avoirdupois it is \$45 57.—*Boston Journal*.

The Buffalo Commercial has a doubtful statement that the Erie Railroad Company, has purchased the Atlantic and Great Western Railroad, and leased the Cleveland and Mahoning, intending to make a junction at Warren, Ohio, and by putting down a third rail on the latter, secure a six foot gauge from Cleveland to New York. We are not informed as to the correctness of the reported purchase, but we have no doubt such an arrangement or a lease which would effect a practical union of the two lines into one would be of great advantage to the Erie company.

SUGAR, MOLASSES, TEA, AND COFFEE.

The consumption of sugar, molasses, tea, and coffee in the United States, as deduced from the records of the Census Bureau, and the reports of the Treasury Department, appears as follows for the year 1860:

The total population of the United States and Territories, for the year 1860, was.....	31,445,099
Of which there were slaves.....	3,953,760
Leaving for total free population.....	27,491,339
Subdividing the Free from the Slave States, we have total population of the Free States.....	19,211,543
And for the free in the Slave States.....	8,279,796

SUGAR.

The production of sugar in 1860 was.....	341,068,508
The importations of foreign sugar in 1860 were.....	692,944,872

Total production and importation, lb.....	1,034,013,440
There was exported of domestic sugar, lb.....	1,133,986
Of foreign sugar, lb.....	29,948,404
	30,122,390

Total consumption of the United States in 1860, lb.....	1,003,591,050
Deduct for 4,100,000 slaves, 12½ lb each.....	504,000,000

Consumption of 27,491,339 population for 1860, lb.....	953,591,050
Equal to a consumption for the free population of the United States of 3470-100 lb each.	

MOLASSES.

The production of molasses in the United States in 1860 was.....	25,516,699
The importations of foreign molasses in 1860 was, galls.....	30,922,633

Total production and importation in 1860 galls.....	56,439,332
---	------------

There was exported of domestic molasses, galls.....	79,439
Foreign molasses, galls.....	1,296,118
	1,305,557

Total consumption of the whole population, galls.....	55,133,779
Estimating the slaves to consume as much as the free, this will give an average of 17-10 of a gallon to each inhabitant.	

TEA.

The importation of tea into the United States for 1860, according to the reports from the Treasury Department, were lb.....	31,696,577
There was re-exported, lb.....	5,309,729

Total consumption of the United States for 1860, lb.....	23,326,930
--	------------

As the slave population do not consume tea, we will have the free population only to divide, which will give an average of about 15½ ounces for each man, woman, and child of the free population.

COFFEE.

The importations of coffee, according to reports of the Treasury Department, for 1860 were—Free, lb.....	200,993,234
Dutiable, lb.....	1,145,982

Total, lb.....	203,144,733
There was re-exported—Free, lb.....	29,071,933
Dutiable, lb.....	24,173
	26,095,200

Total consumption of the United States 1860, lb.....	182,649,322
--	-------------

Averaging nearly 584-100 to the whole population, but allowing, however, 113 per annum to the slave population, and calling them, in round numbers, 4,000,000, we have.....	4,000,000
---	-----------

Consumption of the free population of the United States, lb.....	178,049,337
Or 655-100 lb for each man, woman, and child of the free population.	

NOTES

The import price of foreign sugar in 1860 was 4¼ per lb.	
The import price of foreign molasses in 1860 was 17c per gallon.	
The import price of tea in 1860 was 20c. per lb.	
The import price of coffee in 1860 was 10-100c. per lb.	

MONETARY & COMMERCIAL.

The great feature of the week has been the initiative of the government in a more active war policy. The commission appointed to investigate the surrender of Harper's Ferry have thrown the blame of that disgrace and loss upon men in high position, and the President has promptly removed them. General Burnside succeeds General McClellan in command of the army of the Potomac, and it is supposed the little good weather left will be promptly improved. The only complaint we hear, is that this policy was not initiated sooner. There were reverses a year ago which should have been investigated, and which, if investigated, would have improved the tone of the army. Let us hope there will be no more smoothing over great mistakes, and no more great mistakes to require such a course.

Gold has fluctuated somewhat during the week but closes at nearly our former rates. The following are the quotations:

	Buying.	Selling.
New York.....	$\frac{1}{2}$ dis.	par
Philadelphia.....	$\frac{1}{2}$ dis.	par
Boston.....	$\frac{1}{2}$ dis.	par
Gold.....	23 to 24 prem.	32 to 33, p
Silver.....	23 to 24 prem.	2-@29
Demand Notes.....	24 to 25 prem.	....

Exchange has been in fair demand, but in equal supply. Money continues easy. There is no difficulty in negotiating good business paper at 8@10 per cent. Other grades do not sell readily.

The following are the quotations of bank notes:

Bank of the State Indiana.....	$\frac{1}{2}$ prem.
Kentucky Banks.....	$\frac{1}{2}$ prem.
Canada Banks.....	15 prem.

BANKABLE FUNDS.

State Bank of Ohio.....	Treasury Notes.
Free Banks in good credit.....	

UNCURRENT FUNDS.

New York City.....	$\frac{1}{2}$ dis.
Philadelphia.....	$\frac{1}{2}$ dis.
New York State.....	$\frac{1}{2}$ dis.
New England.....	$\frac{1}{2}$ dis.
MISSOURI—	
Farmer's Bank.....	4 ..
Union Bank.....	5 ..
Easton.....	1 ..
Eastern Virginia.....	45@50
Wheeling, Virginia.....	1 ..
Branches.....	2 ..
Except Jeffersonville.....	28 ..
PENNSYLVANIA—	
Pittsburgh.....	$\frac{1}{2}$..
Interior.....	1@3 ..
MARYLAND—	
Baltimore.....	1 ..
Interior.....	2 ..
Hagerstown.....	3 ..
Michigan.....	1 ..
Union and Planters' Bank of Tennessee.....	10 dis.
Bank of Tennessee.....	10 ..
Other Tenn., except Ocoee (which is 50 dis).....	30 dis.
North and South Carolina.....	45@50
Georgia.....	45@50
Alabama.....	45@50
Indiana free Banks, solvent.....	5 ..
.....insolvent.....	5@10
Illinois Banks.....	2@30
Western Banks.....	2@50
Louisiana.....	20 ..
except Merchants' Bank and Crescent City Bank.....	40 ..

General business continues active. The market for breadstuffs has fluctuated considerably. Flour advanced as high as \$5.60 for superfine

but declined again. At the close superfine could not be sold in round lots at over \$5.40 for that made from original stock, though holders are generally asking \$5.50. Extra sold at \$5.60@5.75, and family at \$5.75@6, the latter an extreme price, and only obtainable for well established brands. Wheat declined fully 3@5c per bushel, and the market closes dull and heavy at \$1@1.02 for prime red, and \$1.10@1.12 for prime to choice Indiana or Ohio White. Prime to choice Kentucky can be bought at prices ranging from \$1.15@1.20. Ear corn is in active request from the retailers, and the supply being light, prices advanced to 49@50c, in bulk, the market closing very firm at these rates. Shelled is in good request at 46@47c, the demand being in excess of the supply.

Oats sell at 52c for old and mixed; new 49 to 50c. Rye is in fair demand at 64@65c. Barley \$1.20@1.25 for Ohio spring; and \$1.30@1.35 for Fall. Whisky 34 $\frac{1}{2}$ c.

Mess pork has been held at \$10.50@11.00 with small demand. Bacon has been in request for army contracts at 5@5 $\frac{1}{2}$ c. Bulk meats nominal at 4c for shoulders, 5c for sides.

—The receipts of the Harlem road for the month of October are as follows:

1861.....	\$97,857 90
1862.....	107,092 76
Increase.....	\$ 9,234 86

—The earnings of the Central Ohio Railroad in August were

Earnings.....	\$67,173 85
Expenses.....	42,076 52
Net earnings.....	\$25,097 37

—The October statement of the Illinois Central Railroad is as follows:

LAND DEPARTMENT.			
Acres construction lands sold.....	2,918 24	\$31,665 82	
Acres int. fund lands sold.....	247 30	2,698 11	
Acres free lands sold.....	2,000 58	21,293 92	
Total sales in Oct., 1862.....	5,166 12	\$58,057 85	
To which add town lot sales.....	.....	229 00	
Total of all.....	.....	\$58,286 85	
Acres sold since Jan. 1, 1862.....	65,397 44	\$733,537 00	
Acres sold previous (net sales).....	1,260,273 46	16,147,973 91	
Total.....	1,325,670 90	\$16,901,540 91	
Construction bonds canceled previous to Sept. 31, 1862.....	\$2,200,000 00		
Cash collected in September.....	73,014 16		
Net collections to Sept. 30, 1862.....	4,457,263 05		
TRAFFIC DEPARTMENT.			
Receipts from passengers.....	\$137,750 49		
Receipts from freight.....	220,514 55		
Receipts from mails.....	6,358 34		
Receipts from rent of road.....	5,333 33		
Receipts from other sources.....	5,400 00		
Total receipts in month of October, 1862.....	\$385,356 71		
Total receipts in month of October, 1861.....	284,020 59		

The receipts of September and October were \$785,791, against \$573,882 in 1861—an increase of \$211,909 in two months.

—The Cleveland and Toledo:

1861.....	\$96,474
1862.....	113,730
Increase.....	\$17,256

—The coining of the Philadelphia Mint in October was as follows:

	Pieces.	Value.
Gold Coinage.....	18,545	\$336,372 88
Silver.....	190,201	35,513 69
Copper.....	3,520 000	35,200 00
Total.....	3,718,747	\$457,086 57

—The Michigan Southern Railroad earned in October:

October, 1862.....	\$323,018 25
October, 1861.....	274,948 76
Increase.....	\$50,069 76

These are the largest earnings in one month by \$40,000, since the road was built.

—The traffic of the Illinois Central for the month of Oct. was:

1862.....	\$325 356 71
1861.....	274 020 59
Increase.....	\$101,336 12
The land for the month were.....	58,057 85
The land collections.....	73,014 16

—The Chicago and Rock Island Road earned in October:

1861.....	\$147,009
1862.....	153,127
Increase.....	\$ 6,730

The earnings of the fourth week were, in

1861.....	\$36,240
1862.....	42,690
Increase.....	6,730

—The earnings of the Hudson River Railroad for October:

October, 1862.....	\$329,910 86
October, 1861.....	173,260 80
Increase.....	\$66,643 96

—The earnings of the Great Western Railway, for the week ending Oct. 31, was as follows:

Passengers.....	\$22,358 93
Freight and live stock.....	39,526 43
Mails and sundries.....	1,342 52

Total.....	63,227 71
Same time last year.....	57,201 53
Increase.....	6,921 18

—The earnings of the Panama Road in September were \$123,029 69, showing a decrease of about \$10,000 on September of last year.

—The earnings of the Toledo and Wabash Railroad for the month of October were:

	1861.	1862.
Passengers.....	\$21,782 00	\$25,481 83
Freight.....	141,076 47	147,388 08
Total.....	\$162,858 47	\$172,869 91
Increase.....		\$10,011 41

—The earnings of the Galena and Chicago Railroad for the fourth week of October:

	1861.	1862.	Ino.
Freight.....	\$52,372 07	\$52,548 31	\$176 24
Passengers.....	10,756 51	13,712 64	Inc. 2,956 13
Mails, &c.....	2,312 00	1,250 00	Dec. 1,462 00
Total.....	\$65,440 67	\$67,540 95	Inc. \$2,100 23
For the month, 1861.....	\$221,326 27		
For the month, 1862.....	207,315 50		

Decrease.....	\$14,010 77
Corrected earnings for the previous month.....	188,369 77

The Michigan Central Road earned in October:

1861.....	\$307,332 80
1862.....	322,360 09
Increase.....	\$15,026 29

UNION PACIFIC RAILROAD COMPANY.

OPENING OF BOOKS OF SUBSCRIPTION.

Books of subscription to the capital stock of the Union Pacific Railroad Company will be opened on Wednesday, the 5th day of November, A. D. 1862, at noon, on the terms and conditions therein set forth, at the places and with the persons following, at their respective places of business.

Albany, New York,	Thomas W. Olcott.
Baltimore, Maryland,	Thomas Swan.
Buffalo, New York,	Dean Richmond.
Boston, Mass.,	Samuel T. Dana.
Burlington, Iowa,	Lyman Cook.
Cincinnati, Ohio,	S. S. L'Hommedieu.
Columbus, Ohio,	Wm. Dennison.
Chicago, Ill.,	Wm. B. Ogden.
Cleveland, Ohio,	Amasa Stone.
Concord, N. H.,	Joseph A. Gilmore.
Carson City, Nevada Ter.,	Wells, Fargo & Co.
Detroit, Mich.,	Charles A. Trowbridge.
Dubuque, Iowa,	Platt Smith.
Denver C'y Colorado,	George W. Clayton.
Hartford, Conn.,	G. P. Blissell & Co.
Ind'nap'lis, Indiana,	James M. Ray.
Louisville, Ky.,	Wells, Fargo & Co.
Leav'n'w'h, Kansas,	Gen. J. C. Stone.
Milwaukee, Wisconsin,	Ed. D. Holton.
N. Y. City, New York,	Hy. V. Poor, at Office of Secretary.
Omaha, Nebraska Ter.,	Alvin Saunders.
Portland, Maine,	Charles E. Barrett.
Portland, Oregon,	Wells, Fargo & Co.
Providence, R. I.,	Walter S. Burgess.
Phila., Penn.,	Jay, Cooke & Co.
Pittsb'g, Penn.,	Thomas N. Howe.
Rutland, Vermont,	Henry H. Baxter.
St. Louis, Mo.,	Wm. M. McPherson.
St. Paul, Minn.,	Parker Paine.
St. L. C'y, Utah,	Brigham Young.
San Francisco, Cal.,	Wells, Fargo & Co.
Trenton, New Jersey,	Philemon Dickerson.
Wilm'g'tn, Del.,	R. R. Robinson & Co.
Wheeling, Va.,	S. Brady.
Wash. C'y D. C.,	R. W. Latham.

Said books of subscription will remain open on the terms aforesaid, for at least two weeks from and after noon of said 5th day of November, at the places with the persons above set forth.

By order of the Board of Commissioners of the Union Pacific Railroad Company. Office of Secretary, 54 William street.

WM. B. OGDEN, *Pres't.*

HENRY V. POOR, *Sec'y.*

THOS. W. OLCOTT, *Treas.*

Dated at New York, this 25th day of October, 1862.

Philadelphia, Wilm'gton & Baltimore RAILROAD!



FOUR PASSENGER TRAINS DAILY!

TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11, P. M., Express.

On Sundays at 3.30, A. M., and 11, P. M.

Leave Baltimore for the North and West daily, at 8.30, A. M., Express; 1.04, P. M., Express; 5.30, P. M., Mail; and 7.01 P. M., Express.

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No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS. CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:00 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:30 P. M.

THIRD TRAIN—6:30 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North-western trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

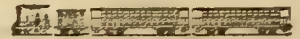
Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.

W. H. L. NOBLE, General Ticket Agent.

C. E. COTTON, Cincinnati Agent.

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Through Distance 280 Miles;

42 Miles Shorter than any other Route

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C., H. and D. Depot, at 7:30 A. M. 7:00 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without re-billing or transshipment.

JOHN BRANT, JR., Superintendent.

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent.

33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON, STOCK BROKER, No. 21 West Third Street, CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and tax collections.

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T. F. RANDOLPH & BRO. Mathematical Instrument Makers No. 67 West 6th St. bet Walnut & Vine CINCINNATI O

BUSH & LOBDELL. Chilled Railroad Car Wheel, Tyre,

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Railroad Machine Works,
Wilmington, Delaware,

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LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

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Either Single or Double Plate,

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WHEELS FITTED

To Hammered or Rolled A

In the best Manner, at the Shortest Notice,

Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition The well-earned reputation of this Road for
SPEED, SECURITY AND COMFORT Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$1.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Baltimore, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

**NEW YORK, BOSTON,
AND ALL EASTERN CITIES,**
CARRYING THE
Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6.

CHARLES MINOT, Gen'l Sup't

W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

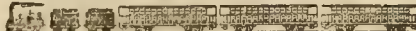
Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men the West that all work furnished by us shall be of the highest quality in style, workmanship and material. Orders are respectfully solicited, with the assurance that we will be prompt to give satisfaction.

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH to PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK.

**THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE AND WASHINGTON.**

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (130 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.

BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburgh.

CLARKE & CO., Transfer Agents, Pittsburgh.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

R. F. SASS, St. Louis, Missouri.

CLARKE & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

Q. B. NEAL, Parkersburg, Virginia.

HALL & CO., Marietta, Ohio.

H. S. PIERCE & CO., Zanesville, Ohio.

MELWELL & McCORM, Portsmouth, Ohio.

R. McNEELY, Maysville, Ky.

J. P. JOHNSTON, Ripley, Ohio.

JOHN TODD, Covington, Ky.

G. L. HEATON, Cleveland, Ohio.

R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.

L. L. HOUTT, Gen'l Ticket Agent, Philadelphia.

H. U. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	4:20 P. M.
Mail and Express.....	10:00 A. M.	10:30 P. M.
Columbus Accommodation.....	4:00 P. M.	10:30 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton. RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:00 A. M.	9:40 P. M.
Cin. & Chicago Air-Line Ex.....	7:30 A. M.	9:40 P. M.
Dayton and Richmond.....	2:00 P. M.	10:10 A. M.
Day., Toledo & Day. Huntsville.....	5:20 P. M.	10:10 A. M.
Cin & Chicago Air Line Ex.....	7:00 P. M.	10:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	8:30 A. M.
Eastern Night Express.....	10:00 P. M.	5:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	6:00 A. M.	11:10 P. M.
Indianapolis and Terre Haute.....	6:00 A. M.	11:13 P. M.
Decatur, Springfield & Quincy.....	11:30 A. M.	3:40 P. M.
Chicago Night Express.....	6:30 P. M.	16:00 A. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	5:00 A. M.	10:05 P. M.
Seymour Accommodation.....	2:00 P. M.	1:15 A. M.
Louisville and St. Louis Night Ex.....	5:00 P. M.	5:53 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES slower than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

P. W. STRADER.

General Ticket Agent L. M. & C. & X., and C. H. & D. Railroads

W. H. L. NORLE.

General Ticket Agent Indianapolis & Cincinnati Railroad.

E. F. FULLER.

General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT REE

NEW YORK

ALBERT BRIDGES.

JOHN

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.
Tube CLEANERS, Steel Wire and Whalebone BRUSH-

Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enamelled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warm-
ing Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Piaz-
za Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.
Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,
28 Platt Street, New York

N. W. BALDWIN, MATHEW BAIRD.
M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of
LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer the engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned
THEODORE DEHON,
no1 10 Wal Broadway, New York

EDWIN J. HORNER,
SUCCESSOR TO
McDANIEL & HORNER,



**LOCOMOTIVE & RAILROAD
CAR SPRING**
MANUFACTURER,
WILMINGTON, : DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky.,	Columbus, O.,
Lafayette, Ind.,	Dayton, O.,
Indianapolis, Ind.,	Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being alike on both sides, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.
Feb 12.

WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

—AND—

Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Sst. 2.

MOSELEY & CO.

JAMES FOSTER, Jr. & CO.,
MATHEMATICAL AND PHILOSOPHICAL INSTRUMENT MAKERS,
S.W. CORNER FIFTH AND RACE,

Cincinnati Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to;

H. TWITCHELL.

JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
Ag 4. m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,
Engine and Car Axles, Pump and Piston Rods
Bar of all Sizes,
And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works
June 9.

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay

JOHN ELLIS, President.

WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1½ to 10 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from ½ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas, Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—4 to 24 inch diameter, and branches for same, &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS, CHAS WHEELER,
THOS. T. TASKER, JR., S. F. M. TASKER,
HY. G. MORRIS.

BUTLER'S

MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroad office for the South and West. For sale by 1,000 leading Stationery and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON, } Editors

CINCINNATI:

THURSDAY, NOVEMBER 20, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion.....	\$1 00
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
“ column, single insertion.....	5 00
“ “ per month.....	10 00
“ “ six months.....	40 00
“ “ per annum.....	80 00
“ page, single insertion.....	15 00
“ “ per month.....	25 00
“ “ six months.....	100 00
“ “ per annum.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	6 30 A. M.	9 20 P. M.
Mail and Express.....	8 30 A. M.	6 20 P. M.
Columbus Accommodation....	4 00 P. M.	11 05 A. M.
Morrow Accommodation.....	6 40 P. M.	8 00 A. M.

Cincinnati, Hamilton & Dayton—

Cin. & Chicago Air Line.....	8 00 A. M.	9 50 P. M.
Dayton & Sandusky.....	6 30 A. M.	6 45 P. M.
Dayton & Toledo.....	6 35 A. M.	11 40 P. M.
Richmond & Dayton.....	3 15 P. M.	6 45 P. M.

Dayton, Lima, Toledo & Hunt- ville.....	5 20 P. M.	10 55 A. M.
Cin. & Chicago Air Line Exp.....	7 00 P. M.	8 15 A. M.
Hamilton Accommodation.....	7 00 P. M.	6 55 A. M.
Eastern Night Express.....	10 00 P. M.	6 40 A. M.

Sandusky, Dayton & Cincinnati— Morning Express.....	6 30 A. M.	6 45 P. M.
Bellefontaine Accommodation..	5 20 P. M.	10 55 A. M.

Marietta & Cincinnati— Mail.....	9 00 A. M.	5 35 P. M.
Accommodation.....	3 30 P. M.	10 15 A. M.

Ohio & Mississippi— Mail.....	5 00 A. M.	10 05 P. M.
Express.....	5 00 P. M.	5 53 A. M.

Indianapolis & Cincinnati— Mail.....	6 00 A. M.	11 00 A. M.
Chicago Express.....	7 10 P. M.	9 20 A. M.

Dayton & Michigan— Toledo, Detroit & Chicago Exp.	6 30 A. M.	11 40 P. M.
Toledo & Chicago Express.....	5 20 P. M.	10 55 A. M.

Cincinnati & Chicago Air Line— Mail and Express.....	8 40 A. M.	8 50 P. M.
Night Express.....	7 00 P. M.	8 15 A. M.

Cincinnati, Wilmington and Zanesville— Morning Express.....	10 00 A. M.	6 45 P. M.
Accommodation.....	6 00 P. M.	8 00 A. M.

Kentucky Central— (City time.) First Train.....	6 30 A. M.	10 44 A. M.
Second Train.....	2 20 P. M.	6 44 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

FUTURE COTTON SUPPLY.

The production of cotton in this country is comparatively of a recent date. Sixty years ago, the export of that commodity was less than five thousand bales. In 1850 the production was about two and a half million bales, which in 1860 was more than doubled, reaching five million two hundred thousand bales of 400 lbs. each. Rapid as has been the increase of production, the consumption has kept pace with the supply, and fears have been expressed that the cotton states could not, for any great length of time, meet the growing demand of manufacturers. These are idle fears, as we shall show in what follows.

Prior to the production of cotton in such large quantities in the Mississippi and gulf states, it was produced to a considerable extent for domestic purposes in Maryland, Virginia, North Carolina, Kentucky, Southern Illinois and Delaware. Latterly, however, the cultivation of cotton in these states has been almost discontinued except in North Carolina and Southern Virginia—the former producing, in 1859, 145,500 bales, and the latter about 13,000 bales. But that cotton can be profitably grown as far north as the 40th degree of north latitude, say the line of the old National Road, is manifest from the result of experiments during the present season. No doubt large quantities of cotton will be grown in future in Southern Ohio, Indiana, Illinois, Missouri and Kansas, as well as on the bottom lands of Kentucky. But it is from the states of Georgia, Alabama, Arkansas, Mississippi, Louisiana and Texas that the great supply must come to meet the future increasing demand of consumers.

To show what has been done, we give the production in these six states in 1849 and 1859 as reported by the census of 1850 and 1860:

	Bales, 1849.	Bales, 1859.
Alabama.....	564,439	997,978
Arkansas.....	65,344	367,483
Georgia.....	499,091	701,840
Louisiana.....	138,737	722,218
Mississippi.....	44,292	1,195,699
Texas.....	58,072	405,100
	1,809,965	4,390,318

It will be seen by this that these six states produce more than four-fifths of all the cotton raised in the United States; and that the increase of production has been nearly two hundred and fifty per cent. in ten years. Tennessee and South Carolina are the other principal cotton states—the former producing, in 1849, 194,532 bales, and in 1859, 227,450, showing an increase of only 22,918. In South Carolina the increase was in about the same ratio, being 353,413 bales in 1859, against 300,901 in 1849.

The number of acres of improved land in the states of Alabama, Arkansas, Georgia, Louisiana, Mississippi and Texas, is 27,000,000. This would give very nearly six acres

of improved land in these states for every bale of cotton produced.

In the six states named, there are seventy-eight millions of acres of land unimproved, that is, land that has been taken up and attached to plantations, and is exclusive of government and swamp lands. These lands, when brought into cultivation, are capable of yielding, if only one bale of cotton to six acres—the average as above—the enormous quantity of 13,000,000 bales, or more than twice and a half the entire cotton crop of all the states in 1859! But this event is in the far off future, if we may judge from the past, for from 1849 to 1859 only ten millions of acres were brought into cultivation in the states named, or one million acres per annum. We must, therefore, look to an increased production from the lands already under cultivation, as was the case in the last decennial. In 1849 the yield was but little more than one bale from every ten acres under cultivation, while in 1859, as above stated, we had a bale from every six acres. But as ordinarily fair cotton land will readily produce two bales per acre, there appears to be no reason why the crop of cotton can not be doubled any year and still leave improved land enough for all other purposes, except it be the want of labor, and, that is precisely “what’s the matter.” To obtain this labor, by opening up the African slave trade the south is now fighting. What their prospects of success are our readers can judge as well as ourselves.

Upon this subject of cotton supply, we have some interesting facts from Prof. Christy, the author of the work called “Cotton is King,” a misnomer, by the way, for the real king of this world is King Corn. Prof. Christy has re-called to our recollection the fact that, some years ago, Congress appropriated all the swamp lands in Arkansas, Louisiana and Mississippi to those states respectively to be sold, and the proceeds to be applied to the construction of levees and drains for the reclamation of these lands, so that they might be used for agricultural purposes. These lands are very rich and many of them already reclaimed were selling at \$50 per acre when the rebellion broke out.

We have no data at hand to estimate the extent of the swamp land, really the best cotton land in the south, but it must be very large. Prof. Christy sets down those of Arkansas at ten million acres. But this is clearly an over estimate, for it would embrace nearly one-third of the entire surface of the state, which contains 52,000 square miles only of territory, or about 33,000,000 acres, including lakes and rivers. If we place these lands at five millions acres, it will readily be seen, that the swamp lands of Arkansas alone, when properly drained and brought under cultivation are capable of furnishing, at the moderate estimate of two bales per acre, double the amount of the largest crop ever harvested in all of the states, that of 1859, or 10,000,000

bales per annum, an amount amply sufficient to meet the wants of consumers for the next fifty years; for it is very apparent that the South has lost for ever her monopoly of the cotton supply. Hereafter she must be content to be one—and the largest—of many to furnish the markets of the world with a commodity that enters into almost every textile fabric manufactured in the world. It was a fatal error that led the southern politicians and planters to suppose that *their* cotton was King, and that it could only be raised by slave labor. It is very true that in the southern states cotton can be grown more cheaply than in almost any other country. *Four bales* to the acre have been produced there; while in India it takes *four acres* to produce *one* bale. But the vast extent of the cotton lands of India, and the cheapness of labor in that country, will make cotton raising profitable at the prices current in 1860, say \$50 per bale of 400 lbs. in New York and Liverpool. Much less rates than those will not satisfy the southern planter unless he can get cheaper labor than he now has, which he is in a fair way of doing, should this war continue for a few months longer. He will then find, what the north has long since discovered, that free labor is cheaper and far more desirable than slave labor. Then we may expect to see the south develop her resources never before witnessed, and the cotton culture carried to an extent not dreamed of by the most zealous adherents of the barbarous institution of African slavery.

CENTRAL RAILROAD OF NEW JERSEY.—The following is a comparison of the receipts, expenses, and net earnings of the nine months ending September 30, 1862, and of the same months in 1861, of the Central Railroad Company of New Jersey:

	1862.	1861.	Increase.
Receipts, 9 months..	\$974,356 35	\$711,806 61	\$103,189 74
Expenses, 9 months.	448,604 64	377,459 50	71,344 13
Net earnings, 9 mths.	\$325,552 72	\$494,407 11	\$31,145 61
The following disposition has been made of the net earnings		\$325,552 72	
Interest for 9 months		\$104,389 66	
Quarterly dividends, 7½ per cent., for 9 months		272,270 00	
United States taxes		3,364 38	
		\$380,004 04	

Surplus of net earnings, 9 months..... \$145,543 68
Against \$117,394 89 for the same period last year.

In passenger receipts there has been a falling off of \$11,441 38; in merchandise, an increase of \$92 110 79, and in coal an increase of \$19,543 79. The deficiency in coal reported last July, owing to the interruption of trade by the June freshet, has thus been more than made up already.

GENERAL TICKET AGENT, INDIANA CENTRAL R. R.—Mr. Horace Parrott, having resigned the position of General Ticket Agent of this Company, J. A. Perkins has been appointed to fill the vacancy. All communications on business matters connected with that department should hereafter be addressed to him.

STREET RAILROADS.

IMPORTANT DECISION.

In the case of the Broadway Railroad, in the city of New York, there has been a strong opposition to the laying down of the rails. Property holders, looking at the present crowded condition of the pavement, believe that if a street railroad in addition is laid down, it will be impossible to do the business which crowds upon that thoroughfare. It is true that there is always a crowd of vehicles of every description on Broadway. But when the omnibusses give way to the street cars, one vehicle will take the load of half a dozen or more, and will occupy scarcely 50 per cent. more space. A remedy for the crowd of loaded drays will be found in making the adjoining streets as passable as Broadway. The Broadway pavement has been the finest in this country, and it is no wonder that it attracts drays and loaded wagons squares out of their way to seek the advantage of a smooth road. Make the adjoining streets as smooth and solid as Broadway, and the advantage of a less crowded pavement will soon relieve the portion above the City Hall Park at least from any very serious crowd. The final decision in this case was rendered in the Supreme Court at its late term, Oct. 28. The following is the report of the case.

The Mayor, &c., vs. John Kerr. This was an application, on the part of the city, to enjoin and restrain the Broadway and Seventh-Avenue Railroad Company from laying rails in those and other streets of the city and running cars thereon.

Judge Ingraham rendered an elaborate decision this morning, denying the application, and releasing the defendants from the temporary injunction placed upon them.

The following is the opinion:

INGRAHAM, P. J.—The plaintiffs, claiming to own the fee of the streets in the City of New York, ask for an injunction restraining the defendants from laying rails through Broadway and other streets, under the authority granted by an act of the Legislature in 1860. (Sess. Laws, ch. 513.) So far as an inquiry might arise as to the owners of the adjoining lots and their right to interfere, I consider the question to be settled in favor of the defendants by the decisions of this Court, as well as the Court of Appeals; and the only material questions for the decision of this motion are whether the Corporation of this city are the owners of the fee of the streets in such a sense as to prevent the Legislature from allowing a railroad to be constructed thereon without their consent, and secondly, whether the construction of a horse railroad in the streets of the city is an encroachment upon the land that will entitle the owner of the soil to compensation.

That the City of New York own the fee of the streets was not denied upon the argument. This is so, undoubtedly, as to all the streets laid out upon the map of the city as made in 1807, and taken by legal proceedings for streets, and which, prior to that time, had not been taken for or appropriated to public use as streets or roads, because by that act the fee of all streets to be taken by virtue thereof was vested in the plaintiffs.

As to other streets in existence prior thereto, the charters of the city and the act of 1793, reenacted and continued in the act of 1813 (2 R. S., p. 423), conveyed to the Mayor, &c., of New York all the right, title, and interest which the Crown of England, and afterward the people of this State, had in any lands used for streets at the time of such conveyance.

But, while the title of the people was thus conveyed to the Corporation by the Legislature, it by no means follows that the whole fee of such streets was vested in them to the exclusion of those who owned the lots bounded on the streets which had been appropriated for that purpose.

Thus it has been held that the fee of Mercer street was in the owner of the land adjoining (4 Cowan 423), and also in the case of Lewis street, of Ridge, Attorney streets, and others which might be referred to, and such undoubtedly would be the rule as to cases of streets in the upper part of the Island, where the owners of the land had made a dedication of the land for a public street, without any proceedings on the part of the city to obtain the title under the statute.

I have never been able to understand how those who owed the fee of the old streets prior to the Act of 1813, or those who owned the fee of streets thus dedicated to the public use, have been deprived of that title, or why they have not still a right to compensation, when such streets are applied to a use different from that which they were so dedicated. The decisions of the General Term of this District and some of the later decisions of the Court of Appeals, however, have held to the contrary, and, while I do not give my assent to the principles therein stated, I feel controlled by them.

If it be conceded that the title to the fee of these streets in the plaintiffs may be interfered with or taken away by the Legislature, without compensation, it must be remembered that such fee is held by them in trust for certain purposes. The *cestui que trusts* are the people. The streets are to be kept open for their use as a public street, and so long as these streets continue, the interest of the plaintiffs in them can only be a trust estate for the benefit of the people.

This trust is not for the people of the city exclusively, but for the whole State, and the question arises whether the *cestui que trusts* may not provide for a different mode of using the streets for public travel, than that contemplated at the time of the creation of the trust. The plaintiffs have no right to object that the mode of travel now is different from that which was formerly in use.

So long as no rights are affected and no interests in land are taken away, the plaintiffs would have no right to complain that the people adopt a different mode of travel from that which existed when they first became the trustees.

Such a power, viz.: to direct the mode in which the trust shall be performed, if such direction does not interfere with the express terms of the trust, has been repeatedly recognized, and if it be conceded that the owners of the lots on a street have no title to the fee of the street, and that the Corporation hold the fee only in trust, to keep the same open for a public street, to be used by the people, and that the same can not be closed without the consent of the people, then I see no reason why the people may not direct the mode in which said street shall be used by the public, provided such direction does not exclude

any from the use of it, and is not an invasion of the right of property of the plaintiffs thereon.

There is no mode in which such public right can be defined and regulated, except by the Legislature; that body represents the people of the State. Their action is for the people, and their acts are the acts of the people. Such acts in regard to the use of the streets must be held valid, if it be conceded that they do not interfere with any rights of property, either of the lot holders on the streets or of the corporation of the city, as the holders of the fee of the streets.

The point has been expressly adjudged by the General Term of the Second District in Brooklyn (Central Railroad Company vs. The Brooklyn City Railroad Company, 33 Barb. 420, and in Brooklyn City Railroad Company vs. Coney Island Railroad Company, 35 Barb. 364). In the latter case, Emott, J., says: "The Legislature possessed the power to confer this privilege of building and using a horse-railroad in the streets of the City of Brooklyn, without the consent of the owners of the soil over which the streets are laid out, because such a use of the street is merely a mode of exercising the public right of travel, and not an appropriation of the property of the owners of the land, requiring compensation in damages. Such a franchise or privilege may also be created or conferred without the consent of the city authorities, if the Legislature sees fit." &c.

And in the case of *The People vs. Kerr and others*, in the 1st District, Wells, J., says: "The power to exempt the grantees from the payment of any damages or compensation for the franchise granted is clearly within the scope of legislative authority." Sutherland, J., concurred with Wells, J., in his conclusions, but has not stated the grounds on which that concurrence was founded. He must, however, have concurred in the views expressed as to the power of the Legislature, or that judgment could not have been sustained.

I wish, in the disposition of this case, to express my dissent to the whole class of these decisions to which it has been held that the city authorities, or the owners of the adjoining lots on a street, whichever one may hold the fee of the street, are not entitled to compensation in damages for the privilege granted to a railroad company to lay their rails in a public street. The rails become fixtures, are laid under the surface, and occupy exclusively a portion of the land, and for such use I think the owner of the fee is entitled to compensation, and I concur with Justice Leonard on this point, as expressed by him in his dissenting opinion.

I am, however, constrained, notwithstanding that I entertain this view of the question, to yield my opinion to that of the General Terms in the First and Second Districts, which have expressed contrary opinions. If those decisions are right that the owners of the soil have no claim for damages for the privileges granted to a railroad in a public street, then I concur in the conclusion that the people being the *cestui que trusts* may prescribe the mode in which their right to the use of the streets is to be exercised by acts of the Legislature.

The disposition of the Legislature thus to take away the right of the city, and the late course of decision in the Courts tending to sustain such acts of the Legislature, and to deprive the public authorities of rights and powers conferred by their charters admonish me of the propriety of yielding to those decisions, whatever may be my opinion as to the questions involved therein.

For these reasons I am of the opinion that the motion of the plaintiffs for an injunction should be denied, and the temporary injunction dissolved.

WASHINGTON AND PROPOSED R. ROADS THEREFROM.

The president of the Board of Aldermen, of the city of Washington, has submitted to the President the following memorial concerning additional railroad facilities to the city of Washington:

To the President of the United States.—

SIR: The undersigned, a committee appointed by the Aldermen and Common Council of the city of Washington, and directly representing the citizens of the country's metropolis, respectfully refer to the meeting heretofore had with your Excellency under authority of joint resolutions of the City Council, urging the immediate construction of certain railroads leading out from the city of Washington.

The necessities, and the importance of the means to sustain and subside our citizens therein set forth, and to protect the city which is the depository of the archives of the Government, has in no way been lessened in the interval between the date of our interview with your Excellency and this moment. On the contrary, all that we then pointed out has been more than fulfilled.

Our object in making this communication is to arrive at some arrangement by which the United States Government, co-operating with the city government, may extend such aid to the Metropolitan Railroad Company as will enable them to build their road from the Point of Rocks to Washington, and thence to the deep water of the Chesapeake.

In the interview, your Excellency was pleased to refer us to the Secretary of War, with the expression of deep interest in the roads, and an earnest wish that they should be constructed; but the Secretary of War declined acting for want of authority of law. We do not propose to argue that point, for we believe it is clear that you can order, or he can make, any contract which will clearly aid in suppressing the rebellion, or that will certainly save an unnecessary expenditure of public money. There is nothing that can contribute more to either of these ends than the construction of roads to Harper's Ferry and the Chesapeake bay.

These facts attest it: The distance from Washington to Harper's Ferry will be reduced fifty-one miles. Had this road been made, the first battle of Bull Run would have been our victory. The massacre at Ball's Bluff could not have occurred. The retreat of Banks and consequent loss of quartermaster and commissary stores and munitions at Martinsburg would not have taken place. The rebel army could not have crossed into Maryland. Harper's Ferry would not have surrendered. The recent raid into Pennsylvania would not have been conceived or carried out—for the simple reason that this single road of forty miles could, in each instance, have transported all the requisite force to aid or to repel, in the short time of one and a half hours. For the want of it, the Union arms, in most of the cases, have been disgraced; the Federal treasury has lost more than ten times the cost of its construction, and the wastage of money, for its want, is continuing to a fearful extent, as the following authentic statement shows:

The movement of freight for Government,

between Washington and the Point of Rocks, over the present distance of ninety-one miles, is now not less than 1,000 tons daily. At its present cost per ton, it amounts to \$6,180 per day, or equal

per year to.....	\$2,255,720
The movement of troops is not less than 30,000	
per month, at a monthly cost of \$57,000, or at	
a cost per year, of.....	648,000

Making a total of that line of.....	\$2,939,720
The movement of freight between Baltimore and	
Washington is about 1,500 tons daily, at a cost	
of \$3.840 per day, or per year....	\$1,401,600
The movement of troops, about 1500	
daily, at a cost, per month, of \$15,-	
000, or per year.....	547,500—\$1,949,100

Or a yearly rate of transportation of.....	\$4,888,820
By the Metropolitan road this same quantity	
of freight could be transported over these points	
or so as to arrive at and from Washington, at	
the following rate: Between Washington and	
Point of Rocks, for freight, 1,000 tons	
daily per year.....	\$584,000
Tr'ps, 1,000 daily, pr. yr..	292,000
	\$876,000

Annapolis to Wash., 1,500	
T'ns of frt daily pr yr....	\$438,000
1,500 tr'ps daily, or pr year.....	219,000—\$657,000—\$1,533,000

Or a saving to the U. S. Treasury of.....	\$3,355,000
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per year, or at that rate per month or per year while this war shall last, for it has now become evident that this rate of transportation must be kept up to and around Washington during the period of the war.

It may be answered that this condition of things can not last long—that the seat of war will be pushed further south. This answer was made by the War Department a year ago, and yet the necessity now for the road is greater than it was, and contingencies may arise to make it of still greater importance.

The citizens of Washington compose about one hundredth part of the population of the loyal United States, and they are liable for that proportion of the amount of this yearly loss, great as it is, and largely as it may be increased by the vicissitudes of the war; hence, being where this wastage occurs, and occurs only for the want of additional means of transportation, they feel that it is a duty not less to themselves, than to the remaining citizens of the country who do not know the fearful expense that is thus wastefully borne, to make an effort to reduce it, not theoretically but in a practical manner by substantial means.

In addition to this general proportion, there is a heavier expense in which the citizens of Washington and Georgetown are solely interested, because it bears upon them alone, and which is caused by this want of means of transportation, or by the almost entire use of the only railroad, and that is the enhanced local cost of all the necessities of life. The average cost of living, as near as can be ascertained, when the means of transportation were open to all, did not exceed 56 cents, including subsistence, fuel, and clothing, on an average throughout the year for each person. By the most careful computation it is now found to exceed 96 cents; and this difference of 40 cents upon a population of about 90,000 is \$36,000 per day—or, the enormous sum of fourteen millions one hundred and forty thousand dollars in each year. It must not be overlooked, either, that this enhancement, this excessive cost, is also creeping into army supplies, and that many millions are thus to be wasted which could, by foresight and decisive energy, be saved to the treasury. A people thus burdened with expense—not of their creating—certainly have the right to point out and to demand that the means of reduction should be applied. In their case this means may be arrived at by two ways.

1st. The abandonment of the use of the existing road by the Government, thus throwing it open to the wants of the people.

2d. By the construction of a new road which will subserve the uses of the government, supply the local district, and prove a lasting benefit to the entire country.

The undersigned do not wish to treat the subject under the *first*, which would be essentially selfish, would impose additional cost upon the country, and would, perhaps, paralyze the army at a moment of its greatest need; but under the *second*, by which all may alike be benefitted, and in the cost of which the citizens will contribute with the government. They, therefore, give the outline of two propositions which will secure the construction of these roads, and respectfully ask that your Excellency will concur in that which you most approve, and order its being immediately entered upon. The Metropolitan Railroad Company,—who hold the chartered right from Congress and from Maryland—will agree to and will carry out either.

1st. That a contract be made between the War Department and the Metropolitan Railroad Company by which that company shall be bound to transport freight for the government, at all times, at a rate not exceeding the average of 4 cents per ton per mile (the rate now paid is 6 2-5 cents per ton) and at a rate not exceeding two cents per mile per head for troops. That the War Department shall advance upon this contract, (having a lien upon the road for performance,) as the road work progresses, and in sums as required, equal to three fourths of the cost of the progressive work, and equal in the aggregate to three fourths of the cost of the road and its equipment. That the sum so advanced shall be repaid in transportation of freight and persons for the government, and if not so repaid in this manner within three years from the completion of the road, by the demand for that service, then the company shall give to the government its mortgage bonds bearing six per cent interest, payable in twenty years from their date, for the balance. And that the company shall provide a sinking fund by setting aside such amount of their earnings as will surely provide for the payment of said bonds within that term. The Secretary of War, the Secretary of the Treasury, and the Secretary of the Interior to be the trustees, to whom the said mortgage shall be made, and to whom the sinking fund shall be paid for extinguishing said mortgage.

2d. Or to contract with the Metropolitan Railroad Company for transportation on same terms, and for construction of said roads, and to loan the said company the credit of the government to the amount of three fourths the cost of the road, by guaranteeing the bonds it may issue for said construction and equipment. The payment of bonds and interest to be secured by mortgage in the same manner as in the first proposition.

It can not be said that either of these proposals, if acted upon, would be building a road by the government, and hence neither are in conflict with the joint resolution of Congress, repealing the act authorizing the construction of roads, while both are in the spirit of existing law, and for the purpose of aiding to suppress the rebellion, and also within the accorded and practiced action of the War Department; and if there is a desire to husband the resources of government, to relieve the burdens of the people, or to provide sure and available facilities to crush out the rebellion, then one or the other of these proposals, it seems to the undersigned, should be accepted

and forthwith acted upon, that these roads may be built immediately. If, however, there are insuperable objections to a positive contract of this nature being entered into by or under the order of the Executive, then we respectfully suggest that you authorize a contract to be made on the basis of either proposal, subject to the approval of Congress. In this last contingency, it is not improbable that the city authorities may be able to secure such aid to the company as will enable it to build the said roads.

These roads can be constructed in four months, and if the war continues they will save not less than three millions annually in the transportation of freight and troops. When the war is ended, they will at all times thereafter be a reliance for the protection and supply of the Capital; and the undersigned feel that they can not too strongly urge upon your Excellency the immediate and favorable decision upon one or the other of these proposals now submitted.

RICH'D WALLACH, Mayor,
N. SARGEANT, of Board of Aldermen,
CHS. GORDON, of Board of Com. Council,
Joint Committee.

TRANSPORTATION OF ONE COMPANY'S CAR OVER THE ROAD OF ANOTHER.

Where a company have sole charge of a car, it is, as to such car, a common carrier. Misrepresentations must be latent in order to avoid such a contract.

This action was brought by the Pennsylvania Railroad Company against the New Jersey Railroad and Transportation Company, for damages sustained by the plaintiffs by reason of the destruction of a car, which in process of transportation over the defendants' road had been thrown from the track.

The case was defended on the ground, that a special contract had been entered into between the parties, by which the car was to be carried at the risk of the plaintiffs.

The case was tried at the Essex Circuit Court in the State of New Jersey, and the jury rendered a verdict in the favor of the plaintiffs and against the defendants for the sum of \$2,534 60 damages. From this verdict the defendants appealed to the Supreme Court of the State of New Jersey, and asked for a new trial of the case, on the ground that the verdict was against the weight of evidence; that the special contract alleged was clearly established by the proof, and consequently, the verdict should have been for the defendants.

The court now refused to grant a new trial, and decided that, where a common carrier undertakes to carry an article for a compensation, the legal presumption is that he does it subject to his common law liability—and this presumption holds until disproved.

That where a railroad company takes a car, though on its own trucks, over their railroad and have the sole charge of it, it is, as to the article transported, a common carrier. This is a different case from one where a party merely tows a boat and furnishes nothing but the motive power.

When an article is delivered to a common carrier for transportation, he must exercise his own judgment as to the mode of carrying it, and he can not escape liability by proving misrepresentations, unless they relate to matters latent in their character. The alleged misrepresentations in this case were as to the

width of the gauge of the car, and the court held that the company, if deceived at all, they were deceived with their eyes open; "the facts were patent—discoverable by inspection or by measurement," and, of course, either party to the contract could have satisfied themselves by an actual measurement.

The following is the opinion of the court rendered at the decision of the case.

POTTS J.—The contract, whatever it was, was made in May, 1850, between Woodruff, as agent of the defendants, and Wasson as agent of Plaintiff's. The cause was tried in January, 1856, nearly six years afterwards; and as the alleged contract rested in *parol*, the jury had to consider how far it was probable the lapse of time had added to the uncertainty of the testimony adduced. The consideration naturally weighed most strongly against the defendants, because the *onus* was upon them to establish the special contract they set up by way of defence.

Where a common carrier undertakes to transport an article in his line of business, the legal presumption is that he does it subject to his common law liability. And this presumption remains until it is overcome by positive proof of a special agreement. 6 Howard U. S. R., 323.

Now in this case Woodruff and Wasson, the immediate parties to the transaction, are directly in conflict. Woodruff swears that he told Wasson the car was to go at his, Wasson's, risk, and that Wasson assented to it; while Wasson as expressly and positively swears that he never made any such contract, as that it should be carried at the risk of the plaintiffs. It is true Mr. Counsellor testifies that he was present at a part of a conversation between Wasson and Woodruff, in which he heard the latter say to the former, that the company would take no responsibility at all; and heard Wasson reply, that he thought there was no risk—that he was going with the car, and was willing to run the risk; but what was said after this he does not know. And it is also true that Mr. Woodruff produced a written memorandum, which he said was made by himself, at the time, expressing that the car was to go at the risk of the party applying to have it transported. But some doubt was thrown over Woodruff's testimony as to the time when it was made, the memorandum being dated the 9th of May—while from Mr. Jackson's letter, informing the plaintiffs of the injury sustained by the car, it would appear that the accident occurred on the 15th.

This was the only direct testimony in relation to the special contract. And the jury, who saw the witnesses and heard the whole evidence, having weighed it, and come to the decision that it was not conclusive against the plaintiffs, I do not think we ought to disturb their verdict on that ground. It was the fault of the defendants, if they meant to make a special contract, that they did not put it in a more definite and certain shape.

The point was incidentally made upon the argument, that this was not a case of *earning* at all, but was analogous to that of towing a boat upon a water navigation, where the party supplying the motive power does not receive the boat into their custody, or exercise any control over it other than such as results from the act of towing; in which case it has been held that the common law liability of carriers does not attach. *Caton vs. Rumney*, 13 Wend 387; *Alexander vs. Greene*, 3 Hill 9; *Wells vs. Steam Navigation Co.*, 2 Comstock 207; *Leonard vs. Hendrickson*, 18 Penn St R. 48. This doctrine has been denied or doubted in *Smith vs. Pierce*, 1 Louisiana R. 349; *Adams*

vs New Orleans Steam Towboat Co., 11 *id.* 46; and Vanderslice vs. Steam Towboat Superior, 13 Law Rep. 399. But, however the rule may be in cases of towing boats under these circumstances, the analogy does not hold good in the present case. Here the defendants received the car to take over their road, and had exclusive charge of it, though they took it on its own trucks.

In the second place, it is argued that the Court below erred in instructing the jury, "that though the plaintiffs or their agent made misrepresentations to the defendants of the character and measurement of the car to be transported, yet that if such misrepresentations related to matters which might have been ascertained by the defendants by measurement and examination, that such misrepresentations can not be held to be a deception."

It appeared in evidence that Wasson had stated to the employees of the New Jersey road that the gauge of this car was one and a half inches narrower than the road, whereas in fact it was two inches narrower; and also, that Cumming's cars, which had been taken over the road, were of the same gauge as this, whereas the plaintiff's car had a narrower tread than Cumming's, amounting to half an inch on each wheel, making an inch difference in the tread. And it is alleged that it was these misrepresentations of Wasson which induced the defendants to take the car on its own trucks, and which occasioned its running off the road.

But it is clear that if the agents of the defendants had measured the gauge and tread of the car before putting it on the track, or examined it when on, they would have discovered the precise extent of both gauge and tread. They were, so to say, deceived with their eyes open. The facts were patent—discoverable by inspection or measurement; and the Court said in substance, that if this was so, it was their own fault if they were deceived. In this there was no error.

When an article is delivered to a common carrier for transportation, he must exercise his own judgment as to the mode of carrying it, and can not shelter himself from the consequences of his common law liability by setting up misrepresentations, unless they respect matters which are latent in their character.

As to the third ground relied on, to wit, that it did not appear that the car was the property of the plaintiff at the time, I think the evidence was sufficient to warrant the verdict.

In my opinion the rule should be discharged.

FREIGHT RATES.—The following is the Winter schedule of freight rates as adopted by the various railroads.

To		NAMED.					
		1st	2d	3d	4th	Per	Car'n
Tulsa.....	Rail	\$0.45	\$0.45	\$0.35	\$0.27	\$0.35	\$....
Dallas.....	Rail	0.55	0.45	0.35	0.30	0.60	....
Cleveland.....	Rail	0.55	0.45	0.35	0.27	0.55	....
Minneapolis.....	Rail	0.55	0.45	0.35	0.40	0.70	....
Chicago.....	Rail	0.70	0.55	0.40	0.30	0.61	....
Baltimore & Dunk.....	Rail	0.55	0.50	0.40	0.50	1.00	4.25
do. do. R.R. & Lk		0.77	0.62	0.57	0.45	0.90	3.85
New York.....	Rail	1.50	1.40	1.25	1.10	2.00	9.00
do. R.R. & Lake		1.72	1.52	1.29	0.95	1.90	8.40
Boston.....	Rail	1.90	1.47	1.30	1.05	2.10	9.50
do. R.R. & Lake		1.82	1.59	1.25	1.10	2.00	9.10
Phil & Balt.....	Rail	1.64	1.30	1.17	0.95	1.90	8.25
Pittsburgh.....	Rail	0.85	0.70	0.60	0.48	0.95	4.25
Trenton.....	Rail	0.85	0.65	0.60	0.56	1.12	....
Quincy.....	Rail	....	....	....	0.20	1.60	....
Portland.....	Rail	1.90	1.47	1.30	1.05	2.10	....
Montreal.....	Rail	....	....	....	0.85	1.70	....
Albany							
Troy	Rail	1.75	1.40	1.25	0.95	1.85	8.76
Bellevue & Lk		1.67	1.52	1.20	0.90	1.75	8.35

SORGHUM SUGAR VS. GLUCOSE.

The molasses of Sorghum has much less sweetness to the taste than that of the ordinary sugar cane. The same difference also exists between the sugar produced from the two articles. This is said to be due to the presence of a substance known in commerce as *Glucose* in the products of the Sorghum, and its absence in the products of the cane. Prof. Christy, in his little work on the Chemistry of Agriculture, thus illustrates this subject.

It is doubtless known to your readers, that much of the starch of commerce is extracted from the potatoe. This vegetable has been analyzed by Einhoff and Lampadius, and they found its proximate elements, in 102½ pounds or parts, to be as follows:

Woody fibre.....	7.0
Starch.....	15.0
Sugar.....	4.1
Albumen.....	1.4
Water.....	75.0—102½.

It will be seen, that when the water of the potatoe is dried out of 102½ lbs., there is left, of solid matter, 27½ lbs., and that of this residue 15 lbs. are starch, and 4 1-10 lbs. are sugar. It thus appears that 5 9ths (five ninths) of the solid matter of the potatoe can be converted into starch, and that its manufacture, in the Northern States where large crops of the potatoe are raised, may become an important branch of business.

It is also known to some of your readers, that starch, by a simple chemical process, can be converted into sugar; and that, therefore, over two thirds of the bulk of dried potatoes can be transformed into sugar, as 19½ lbs. of the 27½ lbs. are starch and sugar.

It should be here remarked that the sugar manufactured from starch is termed in chemistry *granular* sugar, to distinguish it from the cane, maple and beet root sugar, which is called *crystalline* sugar. The former is known in commerce by the name of *Glucose*. It differs from cane sugar in being granular instead of crystalline. It is found in granules attached to dried raisins, figs, grapes, and other fruits of acid properties.

The chemical agent employed in converting starch into sugar is sulphuric acid. During the process the starch is first converted into gum and then into sugar. The process of its manufacture is as follows: To 1,000 parts of water there is added 10 parts of sulphuric acid, and 500 of starch. The dilute acid is heated by steam to between 212 and 220 degrees Fahrenheit, and the starch, previously mixed to about the consistency of thin cream, with water of a temperature between 112 and 130 deg. Fahrenheit, is then suffered gradually to dribble in under constant stirring; its conversion into gum is immediate; in about two hours and a half the whole of the starch is added, and in from 15 to 25 minutes afterwards the process is complete; the steam is then shut off, and the liquor transferred to another vat, so that the first may receive a new charge. In this second vat there is added powdered chalk, which receives the sulphuric acid into combination with it, and thus leaves the syrup free from the acid. The powdered chalk is added slowly to prevent too much effervescence, and when the sulphate of lime, thus formed, settles to the bottom, the clear liquid is drawn off and rapidly evaporated. To deprive it of coloring matter, and to improve its flavor, the syrup is passed while hot through filters of coarse powdered animal

charcoal, and farther concentrated by evaporation in a steam vat, when it is poured into shallow coolers and allowed to concrete. For additional particulars the reader may refer to the work above cited. There are points of difference between starch sugar and cane sugar, as to their relative sweetening powers, which we shall not notice.

Glucose is at present largely manufactured from the Potato Starch. In France where it is sold as an article of commerce, and the proposition to engage in its production in Ohio is no visionary matter. If, therefore, we can direct a part of our labor to the manufacture of sugar from the potatoe, we will thus lessen the dependence of our country on foreign nations for this article of necessity.

POLAND.

HER MINES AND RAILWAYS.

Mining in Poland has hitherto been carried on in a feeble and unprofitable manner. It is believed, however, that the ironstone resources of the kingdom might, with better management, be developed to a much greater extent; but at present they do not yield sufficient to meet the requirements of the country, and rails to the value £100,000 have only recently been imported from England, to supply the wants of the net work of railways which is being gradually constructed. Strange as it may appear to some, Polish industry is yet in such a crude, ill-developed stage, that English rails can be delivered at Warsaw at a cheaper rate than those made in Poland. The production of iron in Poland in 1860 was estimated as follows: Pig iron and rough castings, 24,670 tons; hammered and rolled iron, 13,756 tons; sheet iron, 998 tons; or altogether, 39,424 tons. The relative price of Polish to English is in the ratio of eight to five, notwithstanding that the ores of Poland yield from 20 to 40 per cent. of iron, while labor is cheap, and fuel, either charcoal or coke, pretty readily procured. Defective management can alone be the explanation of such unsatisfactory results. English models of machinery are a good deal imitated in Poland, especially as regards agricultural implements, for which there is a good demand. Coal is found in the Olkusz district, and its working has recently been prosecuted with increased vigor, as the demand steadily advances both on account of private consumption, and the various foundries and manufacturing establishments in the country. The production of the Government coal mines, in 1860, was estimated at 100,000 tons, and that of the private mines at 50,833 tons. This rate of production has since been somewhat increased, but the consumptive demand is still far from being met, as the foundries and factories are at least 100,000, and railways 200,000 tons per annum, to say nothing of private demand. Coal is consequently imported from England among other sources of external supply, but not to any very great extent, the value of the quantity received in 1861 being only estimated at £17,722. Railways have only arrived at a very imperfect stage in Poland, the only system at present opened for through traffic being the Warsaw and Vienna, which has a short branch connecting it with the Prussian network of lines, and passes through a portion of the mining districts of the kingdom. This line, originally constructed by the Government, has, since 1857, been worked by a company under whose management the receipts have very

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	R. of Int.	Quotation of Bond.	Duo.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	48													
Baltimore and Ohio.....	Md.	64	380	13,111,800	10,781,833	566,07	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling.	3,000,000	5			
do do										Mortgage.....	2,500,000	6	95	1885	
do do										"	700,000	6	84	1880	
do do										"	1,125,500	6	90	1875	
do Washington Branch.....	Md.	30		1,650,000						"	1,000,000	6		1887	
Bellefontaine and Indiana.....	Ohio & Ind.	118		1,859,813	1,256,750	139,14	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7	55	1886	
do do										2d "	160,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	60	68	1,950,950	1,049,000	27,54	911,019	495,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	138		3,798,400	8,880,000		1,997,465	733,950	Dec. 31, 1860	1st Mortgage.....	450,000	6	100	1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,400	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	800,000	7	62	1861	
do do										1st "	800,000	7	70	1864	
do do										2d "	800,000	7	64	1865	
do do										3d "	950,000	7		1885	
do do										4th " S. P.	1,365,800	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d "	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	232		In hands of Receiver.	6,168,320	730,000	904,569	225,767	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7			
do do										2d "	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						3d "	1,060,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	104		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	2d "	200,000				
do do										Pref 1st Mor. & S. P.	1,250,000	7	101	Feb. & Aug. 1	
do do										Gen'l 1st Mortgage.	3,600,000	7	77	Feb. & Aug. 1	
Chicago and Rock Island.....	Ills.	80	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	2d "	2,400,000	6	31	May 1.	
Chicago, Burlington and Quincy.....	"	88	138	4,689,340	4,814,515		1,514,428	761,530		1st Mortgage.....	2,000,000	7	105	1870	
do do										Cons. 1st Mort. S. P.	2,172,000	8	110	1873	
do do										" 2d " S. P.	813,000	8	108	1890	
do do										1st Mor. Chi. & Aur.	390,000	7		1867	
do do										2d "	308,000	7		1869	
do do										1st " Cent. Mil Tract	390,000	7		1884	
do do										2d "	245,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	105	60	2,155,800	1,356,000		644,928	174,535	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	950,000	7	100	1880	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,303,000				
do do										2d "	532,000				
do do										3d "	104,000				
Cleveland and Mahoning	Ohio.	68		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,509				
do do										1st Mortgage.....	850,000	7	80		
do do										2d "	400,000	7			
Cleveland and Pittsburgh.....	Ohio & Pa.	40	106	In hands of Receiver.	4,918,325	653,821				3d "	344,000	8			
do do										1st Mortgage M. L.	800,000	7	100	1880	
do do										2d " M. L. or 1st Ex.	1,175,000	7	99	1873	
do do										3d 2d Ex.....	1,165,000	7	81	1865	
Cleveland and Toledo.....	Ohio.	67	143	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	4th 3d Ex.....	1,134,000	7	75		
do do										1st Mor. Jan. 1st Div.	339,000		103	1867	
do do										1st " " 2d Div.	263,000			1872	
do do										2d "	265,000			1862	
do do										1st " Tol. Nor & Cleve	521,000			1863	
do do										2d "	283,300			1861	
do do										3d "	44,500			1862	
do do										Junction Income..	300,000			1864	
do do										C. & T. Income...	519,000			1864 & 1890	
Cleveland, Columbus and Cincinnati..	Ohio.	136	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000				
Cleveland, Painesville and Ashabula..	"	135	98	3,000,000	1,602,000	none	1,063,403	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	106	1861	
do do										2d "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	115	54	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700		100	1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,176,666	292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142			2,512,000					2d "	2,212,000	8			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,563	Aug. 31, 1860	1st Mortgage.....	300,000	7	50	1875	
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000	7	90	1875	
do do										2d "	1,000,000	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	798,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		986,061	1,219,100	249,68	124,140			2d "	180,000				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
Galena and Chicago Union.....	Ills.	82	121	6,028,300	3,524,300	none	1,462,752	652,960	Dec. 31, 1860.	2d "	180,000				
do do										1st Mortgage.....	1,993,000		104	1862 & 1863	
Great Western	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	2d "	1,520,000		100	May 1, 1875	
do do										1st Mortgage W. D.	1,041,000	10			
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report					1st " E. D.	1,350,000	7			
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573							
Hannibal and St. Joseph.....	Mo.	206		1,041,086	10,554,000	220,36	996,907	512,933	Sept. 1, 1860.	Land Mortgage...	5,000,000				
do do										Mortgage Conv.....	1,354,000		50		
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1866	1st Mortgage.....	927,000	6	30	1873	
Hudson River.....	N. Y.	75	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	115	1869 & 1870	
do do										2d S. P.	2,000,000	7	105	1880	
do do										3d "	1,840,000	7	101	1875	
Illinois Central.....	Ills.	76	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000	7	108	1863	
do do										Construction.....	12,885,000	7	100	1875	
do do										"	4,115,000	6	97	1875	
do do										Debentures.....	42,740				
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000	7			
do do										2d "	578,000	10			
do do										Income.....	38,700	11			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000			1866	
do do										2d "	400,000	7	90		
Indianapolis, Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort...	200,000	7	90		
do do										1st Mortgage.....	649,984				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d "	314,000				
Iron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quota of Stock.	Lot of Rnd.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.	86		\$ 190,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jedersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860	1st ".....	240,000	7	75	1861
do										2d ".....	392,000	7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st ".....	250,000	7		
do										2d " Conv.....	1,000,000	7		
do										3d ".....	600,000	7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.....	904,000		89	
do										2d " E. D.....	1,000,000			
do										1st Land Grant W D.....	4,000,000		21	
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.	29		514,433	130,000		105,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1863
Little Miami.....	Ohio.	65					1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000	6		
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		245,910	98,679	June 30, 1861	1st Mortgage.....	218,000	7		
do										1st Mortgage.....	2,000,000	7		
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.....	400,000			
do										1st " Memphis Br.....	500,000			
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861
Marietta and Cincinnati.....	Ohio.	208		8,561,213	190,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv.....	2,500,000	7		1868
do										2d ".....	2,000,000	7		
do										3d ".....	1,500,000	7		
do										Sterling Income.....	333,000	4		
do										Domestic.....	925,617			
Michigan Central.....	Mich.	881	284	6,057,784	7,968,429	125,000	2,136,699	910,169	May 31, 1861	1st Mortg? Sterling.....	467,483	6	98 1/2	1872
do										1st " Conv.....	500,000	8	84	1869
do										1st " unconv.....	250,000	8	96	1860
do										1st " Dollar Conv.....	2,590,000	8	106	1869
do										1st " S. F. Conv.....	4,153,000	8	112 1/2	1862
Michigan South'n & North'n Indiana	Mich &	401	246	9,018,200	9,714,704	437,886	2,075,450	1,039,829	Mar. 31, 1861.	Mort. Mich. S.....	991,000		108	1860
do										" Nor. Ind.....	985,000		103	1861
do										" Goshen Line.....	1,168,000		100	1863
do										S. F. Toledo.....	2,250,000		103 1/2	1865
do										2d Mortgage.....	2,465,000		93 1/2	1877
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d ".....	200,000	8		
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8		
do										2d ".....	600,000	8		
Milwaukee and Prairie du Chien.....	Wis.	34	192	4,944,000	2,556,000		683,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	104	1891
Milwaukee and Western.....	Wis.	71		No report										
Mississippi and Missouri.....	Iowa,	55		No report						1st Mortgage Conv.....	1,000,000	7	96	
do										2d " S. F.....	400,000	8		
do										Oskaloosa Div.....	1,425,000	7		
do										Land Grant.....	7,000,000	7		
New Jersey.....	N. J.	34		4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000		109	
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.					
New York and Erie Pref.....	N. Y.	901		Sold under mortgage			5,590,916	1,979,400	Sept. 30, 1860	1st Mortgage.....	3,000,000		106	
do		63 1/2								2d ".....	410,000		110	
do										3d ".....	600,000		107	
do										4th ".....	4,900,000		100	
do										5th ".....	1,792,500		100	
New York and Harlem Pref.....	Conn.	481	138	5,717,190	6,055,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	109 1/2	1873
do common		21								2d ".....	1,000,000	7	103	1864
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,373	Apr. 1, 1861.	Mortgage.....	912,000	7	94	Dec. 1, 1866
do											975,000	6		Oct. 1, 1875
New York Central.....	N. Y.	104	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.....	7,923,000	6	105	May 1, 1873
do										Mortgage.....	3,000,000	7	109	June 15, 1864
Northern Central.....	Md.	138		2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,660,500	6		1885
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6		
Ohio and Mississippi, Eastern Div.....	Ohio & Ind	192		Leased.	9,880,000	2,330,030	698,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500			
do										2d ".....	316,995			
do										Construction.....	4,637,920			
do										Income.....	3,591,185			
Ohio and Mississippi, Western Div.....	Ills.	148			3,292,403		No report			State Loan.....	7,000,000			
Pacific.....	Mo.			3,199,692	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W.....	2,800,000	6		
do										Construction.....	4,500,000	6		
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.....	4,905,000	6	104 1/2	1888
do										2d ".....	2,319,000	6	98 1/2	1875
do										2d " Sterling.....	1,957,440	6	89	1875
do										State Works.....	7,200,000	5		
Peru and Indianapolis.....	Ind.	74		1,100,090	820,000	80,000	No report			1st Mortgage.....	2,300,000	6	99 1/2	1884
Philadelphia, Wil. and Baltimore.....	Del.	98		5,600,000	2,340,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6	105 1/2	1863
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	53	467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	1st Mort. O. & P.....	1,000,000	7	92	1865
do										2d ".....	750,000	7		1866
do										1st " O. & I.....	1,000,000	7		1872
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,553	29,680	Oct. 31, 1860.	2d ".....	380,000	7		1873
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,000	1,085,328	220,850	68,438	May 10, 1861.	Pittsburgh Subs'n.....	500,000			
do														
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856
do										".....	997,000	7		1866
do										".....	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1866
do														
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	56		401,975	500,000	100,000	110,200	53,100		1st Mortgage.....	500,000			
do		50		1,000,000	1,050,000	200,000				2d ".....	450,000			
Staubenville and Indiana..	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d ".....	900,000	7		1865
Terre Haute, Alton and St. Louis....	Ills.	208		No report						1st Mortgage Conv.....	1,000,000	7	98	1862
do										2d " Conv.....	2,000,000	7	78	1868 & 1870
do										1st " Bel. & Ill.....	517,000	7		1873
Terre Haute and Richmond.....	Ind.	105	73	1,341,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	240,000	7	106	1866
Toledo, Wabash and Western.....	Ohio & Ind	35	343	2,123,506	3,926,049	52,389	233,545			1st Mortgage.....	3,400,000	7	98 1/2	Aug. 1, 1865
do Preferred		78								2d ".....	2,500,000	7	80 1/2	Nov. 1, 1870
do										Mort. Coupons.....	90,449	7		1860 to 1882

materially expanded. Another line now nearly completed will connect Warsaw with St. Petersburg, passing through the towns of Bayalastok, Grodno and Wilna, and joining the direct line already opened from St. Petersburg to Berlin at this latter town. This line has been constructed by a French company who obtained large concessions from the Imperial Government, with a guarantee of five per cent. on the capital expended, but a dispute having lately arisen between the department of bridges and roads and the company, the management of the line has been taken out of its hands, and transferred to the department named. A third line is also in course of construction to connect the town of Bromberg with Warsaw, passing through the towns of Thora, Kwytho and Lowicz, and joining the Warsaw and Vienna line at Skierniewiez. The Vienna line is now regarded as a commercial success. The Bromberg is expected to assist materially in developing the resources of the country, as it will place Poland in direct communication with Dantzic, and thus avoid the uncertainty and delay attending the navigation of the Vistula. It is doubted, however, whether sufficient traffic will be realized for years to come, to make it a remunerative enterprise. Warsaw is in direct communication with St. Petersburg and all the capitals of Europe; the vigor with which the intelligent despotism which presides at St. Petersburg has spread a network of telegraphic wires over the vast empire under its control is something wonderful; of course railways can not be constructed with equal speed and facility, but they will come in time.—*London Colliery Guardian*.

IMPERIAL CORN HUSK CLOTH AND PAPER.

There has been no time for ten years when the paper makers were more in want of a substitute for rags than the present; nor any time when an inventor or discover would be more patiently listened to. The consumption of paper in this country of readers and writers, is and has been for years in excess of supply; at one time (1854) so much that the price advanced 2½ cents per pound, and weekly journals had to reduce their size, increase their rates, or go into liquidation. That year we imported more than a million dollars worth of rags, and the curious traffic in the tatters of all nations has increased from year to year, until we are now importing at the rate of two million dollars per annum. Say that the paper manufacture of the United States is worth fifty millions a year, and that some fibrous material, of universal production, were found which could be made up at half the cost of rags, what would it be worth to the discoverer? Why a fabulous fortune, that would tower above those of all the Astors and Girards who ever lived; and the hope of realizing such golden dreams has stimulated inventors to research and experiment for years past. The straw of grain, the stalks of marsh-reeds, the inner bark of forest trees, and the very wood itself have by turns been made into paper and introduced to public notice. All processes and modes of treatment, from simple maceration in water to boiling in hot ley, and shooting out of a steam gun have been employed in the transformation of the organized woody fibre into pulp. Many failures and no fortunes have been the result; but one invention is no sooner forgotten than another claims attention. The latest attempt to furnish a substitute for rags is that of an Austri-

an, who is now applying at Washington for his letters patent "for the discovery of a new spinning and weaving material, and the utility of its waste," the manufacture of paper being contemplated in the latter clause.

The Chinese have been making paper from reeds, bamboo, rushes, and the stalk of wild and tame grasses, for more than fourteen centuries. In fact, so many substances are employed in that empire that each province has a variety of paper peculiar to itself. In Fo-Kien, for instance, the material most used is the stalk of the young bamboo, which by maceration, bleaching, the use of alkalies, boiling and beating is made into a stout, serviceable paper. The soft, velvety rice-paper on which the Chinese paintings of flowers, birds, insects, and club-footed female beauties are made, is produced from the stems of a hardy leguminous plant, which grows abundantly on the marshy plains of Bengal and about the lakes of Calcutta. The Japanese use the inner bark of four or five species of trees, and make paper of all qualities, from the thinnest and finest to the heavier sorts which are used for clothing, and can hardly be told from silken or woollen stuffs.

Mr. Munsell of Albany, whose "Chronology of Paper and Paper Making" is perhaps our best American authority, enumerates 103 substances which have been experimented upon in various countries by paper makers. In the Smithsonian Institution there is a copy of a work on the manufacture of paper from other materials than rags, which is printed on more than sixty varieties of paper made from as many different materials. The works of the Marquis de Villette, published in London in 1786, in 24mo., are printed on paper made from marsh-mallow; and at the end are single leaves of paper manufactured at Bruges from twenty different species of plants, including the nettle, hops, moss, reed, and several kinds of of trees and herbs. (Appleton's new American Cyclopædia.)

It would indeed be strange if with all this experiment, and all this searching in swamps and jungles for paper material, a plant so widely disseminated as maize should have been overlooked. In truth, we must believe that two mills for making corn-stalk paper really existed in Italy a century ago, for they are mentioned in Doctor Schaefer's *Sammtliche Papier-versuche* (Regensburg, 1772), but the secret of the processes employed seems to have died with the enterprising mill-owners. Travelers tell us also that the Chinese have long made paper from the woody fibre of sorghum and corn stalks, and some ten years ago a Frenchman came to this country to patent a similar process. The introduction of the Chinese and African sugar canes into France by Count de Moutigny and Mr. Leonard Wray, in 1851-52, created much excitement from their supposed ability to rival the tropical sugar cane, and as a collateral matter some attention was paid to the subject of making paper from the fibre of their stalks. Dr. Sicard of Marseilles, MM. Duret, Hudedist, Vospette and others experimented to some extent in that direction, and many pamphlets were written to herald what was supposed to be a great discovery. Olcott, in his "Sorgho and Imphee" (New York, 1857), notices these experiments, and gives most of the processes; but neither has since proved of sufficient practical value to secure adoption either here or in France.

After a rest of ten years, the subject is revived by Counselor Auer von Welsbach, director of the Imperial Printing establishment in Vienna, Superintendent of the Imperial

Paper Mill at Schlöggelmühle, and member of the Austrian Academy of Sciences. This gentleman was in 1856 ordered by Baron Bruck, Minister of Finance, to superintend a series of experiments with a new process for making paper from corn stalks, invented by a Bohemian named Moritz Diamant. Accordingly the resources of the Imperial paper mill were placed at Diamant's disposal; but he was unable by his process to produce paper either as cheaply or of as good quality as that made in the usual way from rags, and the experiments were stopped. In 1859, he made another appeal to Baron Bruck—this time backed by such recommendations from Trieste that the minister agreed to give him another trial at the Imperial mill; but this, like its predecessor, failed. Baron Bruck did even more, for when Diamant argued that the cost of transporting the raw material made it impossible for him to produce his paper at marketable rates, the government consented to build him a factory for making "half-stuff" in a district where Indian corn was grown on the largest scale. Unhappily for him, however, this venture brought in no better returns than its predecessors; so, after wasting nearly a year, and spending about 30,000 florins, the government decided that it had had enough of the Herr Diamant and his corn-stalk paper.

But, in each of the trials, good writing, printing and wrapping paper had been made, and Counselor Auer had been so much interested in the subject, that he decided to continue the experiments on his own account. Diamant's efforts had been to produce a paper from the fibre of the whole corn stalk, and much of his trouble had come from the expensive process of separating and bleaching such coarse material. The coating of the stalk was in great part composed of silex, which had to be made soluble silicates by means of alkalies, and removed, before the fibre could be used at all. Counselor Auer saw at once that all this might be avoided by using the husks alone, the fibre of which was fine, of good length, and easy to work, and if paper were to be made at all from the plant, it must be from the husk. He worked at his vats, his beaters and his rollers, until he hit upon a simple, cheap and effective way to separate and bleach the fibres, and made ream after ream of paper, of almost all the varieties known in commerce. While his experiments were in progress he bethought him that the fibre of corn stalk might be twisted into yarn, and spun and woven into textile fabrics, as well as that of flax, hemp, or cotton, and after some trouble succeeded in the attempt. In the process of extracting the fibre, a large quantity of farinaceous matter was precipitated which, on trial, was found to make a sweet, palatable bread. The new fabric was patented in Europe, and the inventor is now applying at Washington for similar protection. Accompanying his application are historical sketches of his invention, and an argument setting forth the reasonableness of his claims. The document is fortified with specimens of the various products which the plant has yielded in the course of his experiments. Among them are sheets of paper of various qualities, some of the fibre prepared for the spinner, some yarn, and a bit of coarse bagging cloth. Herr Auer lays most stress upon his application of the husk fibre to the manufacture of textile fabrics; but, badly as we are off for a substitute for cotton, it is plain that this invention has but little interest for us, except as a means of reducing the cost of paper. If it will do that, it will be a public benefit; if

not, it will share the fate of its predecessors. The inventor argues thus: The basis of paper is vegetable fibres; rags are only flax, hemp, or cotton fibres which have been worn as garments and sold to the paper maker at a very small price. If those fibres had been used direct from the plant and not woven into cloth, the paper would have been much better, but vastly more expensive. The wearer of the fabrics has paid the heaviest cost of preparing the plant fibre for the paper mill, and sells his tatters for a mere song. Rags, therefore, must be the cheapest and best material for making paper, and the manufacturer can not afford to make his finer sorts of paper from anything but flax, hemp or cotton rags, or waste, until a new material is introduced which can be spun and woven into garments, and sold to them in the form of rags.

So far so good; but Mr. Auer will never be able, we judge, to produce from the silkiest corn-husk a fibre as smooth, strong and tender as those of flax or cotton. The pulp of the finest specimen in the collection, kindly sent to us by D. P. Holloway, United States Commissioner of patents, is coarser than that of paper made from the usual plants. It can hardly ever come into general use for the production of fine papers, but may take precedence of straw and basswood for the coarser varieties. It is true that the inventor's application for a patent is engrossed on blue ruled paper made from corn husk, and that the catalogue of the Austrian contributions to this year's World's Fair is printed half on paper made from pure corn husk fibre, and half on that which contains a certain proportion of rags, but this would hardly warrant our giving it unqualified indorsement. The inventor has one thing in his favor, in the simplicity and cheapness of his process for separating the fibre. He claims that "the humblest laborer can learn the process when he has been once instructed verbally or in writing, and can obtain the products on the corn-field itself without expense. Owners of large farms or manufacturers can produce hundreds of cwt. daily in steam boilers." "Austria will first endeavor," says Dr. Auer, "to produce enough for home consumption, and then realize a large foreign export." We hope she may, and as we have to use rather more than a half million sheets of paper a week, we will gladly assist in the introduction of a substitute for rags which would make paper as cheaply as this eminent Austrian thinks his process will.—*N. Y. Tribune.*

—UNION PACIFIC R. R.—In our advertising columns will be found a notice of the opening of books for subscription to the stock of this company. Mr. L'Hommedieu, the gentleman in charge of the books in this city, is well known as president of the Cincinnati, Hamilton and Dayton Railroad, and is a successful railroad manager. It is to be hoped that the Union Pacific Railroad will start with a liberal subscription and will be built rapidly. The importance of the enterprise and the liberal grants made to the company by Congress, warrant the supposition that the stock of the company will be valuable.

The Norwich and Worcester road earned about \$10,000 in October—an increase of \$4,500 on October, 1861, which was the largest month in the history of the road.

MONETARY & COMMERCIAL.

The week has been mainly a quiet one in monetary circles. There has not been a very heavy demand for money, although it is in more request than at any other period this fall. The recent changes in the Army of the Potomac produced no such great excitement among the troops, as was foretold by the friends of its recent commander. The transfer of the command was made quietly and the troops received it as a matter of course. There is considerable confidence felt in the energy and activity of the new commander, and it is to be hoped that he will not disappoint the expectations formed of him. On his action depends much of the public confidence in the security of the government and the value of its bonds.

The discount market has been easy at the former low rates. Indeed money may be regularly quoted now at 8 to 10 per cent. for good business paper, with little sale for any other class.

Exchange has been quite active during the week but rates are the same as heretofore. We quote as follows:

	Buying.	Selling.
New York.....	$\frac{1}{2}$ dis.	par
Philadelphia.....	$\frac{1}{2}$ dis.	par
Boston.....	$\frac{1}{2}$ dis.	par
Baltimore.....	$\frac{1}{2}$ dis.	par
Gold.....	29 to 30 prem.	32 to 33 prem.
Silver.....	29 to 30 prem.	25 to 27 prem.
Demand Notes.....	22 to 24 prem.	....

Coin has not fluctuated much in our market during the week. There is a good demand from those who propose to follow the Federal armies to the South in quest of cotton. Hence prices are sustained at rates a little higher than our eastern quotations.

The weather the past week has been warm and rainy, and not at all favorable to the packing business. The receipts of the week foot up to 57,000 head of hogs. Under this large supply and unfavorable weather, prices declined. Sales ranged in the early part of the week from \$4.55 to \$4.60. But towards the close declined to \$4.25 to \$4.50.

The Price Current argues that the short crop of corn will throw pork earlier into market this year than is common, but will cause lighter weight. The following is its summary of the total receipts of the season as compared with previous years.

Years.	No.	Years.	No.
1850-1.....	334,000	1856-7.....	344,512
1851-2.....	352,000	1857-8.....	346,677
1852-3.....	361,000	1858-9.....	342,826
1853-4.....	421,000	1859-60.....	431,499
1854-5.....	3,578	1860-61.....	433,799
1855-6.....	405,206	1861-62.....	474,467

Mess pork sells at \$10.50 to \$10.75 for city brands. Country brands sell at \$10.25 to \$10.50. Little is doing in bulk meats. Lard is dull at 8 $\frac{1}{2}$ to 8 $\frac{3}{4}$ c. Green meats sell at 3 $\frac{1}{4}$ c for shoulders, and 5 $\frac{1}{4}$ c for hams. Bacon is largely required for government contracts, but seems to be in good supply. Shoulders are quoted at 5 to 5 $\frac{1}{4}$ c, and sides at 5 $\frac{1}{2}$ to 6c loose.

Flour is dull and prices low. Superfine is quoted at \$5.00 to \$5.05. Extra at \$5.10 to \$5.25. Family \$5.30 to \$5.50. Wheat is also dull. Buyers are holding off. Sellers ask

\$1.00 for prime Red and \$1.10 to \$1.12 for prime White. We have liberal receipts of corn and prices are higher. Shelled brings 50 to 51c and ear 52 to 53c in bulk. Oats are dull. New oats bring 48c old 50 to 51c. Rye brings 64 to 65c. Barley is dull. Asking prices \$1.30 to \$1.35 for prime Fall, and \$1.20 to \$1.25 for Spring. Whiskey is also dull at 34 $\frac{1}{2}$ c. Sales are made at 18 to 19c under bond for manufacture of alcohol to ship abroad.

Eastern advices note an easy money market. The Stock Board of New York have determined to re-open the speculation in gold. And as one Stock Board is not enough for all the speculators in the great emporium, steps have been taken to organize another. The New York Tribune of the 17th says:

The Board of Brokers, to-day, by a large vote, resumed the dealings in Gold and Demand Notes at their sessions, and also removed the restriction upon time sales. They decided their action had not checked the speculation in the precious metal, and that nothing could check it but a unanimous refusal upon the part of banks and capitalists to lend money upon Gold.

Money is working easier although there is no change in rates. The current quotations are 6@7 per cent. on favorite collaterals, although some transactions are made at 5 per cent. In paper there is no change to note. Leading names are passed at 4 $\frac{1}{2}$ @6 per cent.

The movement in Gold to-day has been active, and the quotation advanced from 131 $\frac{1}{2}$ to 132, closing offered at 131 $\frac{1}{2}$. Demand Notes are 125 $\frac{1}{2}$ @125 $\frac{1}{4}$. The 7.30's have sold to large retail at 104, and were 104 $\frac{1}{2}$ bid at the close.

An adjourned meeting was held Saturday evening at the Fifth Avenue Hotel, to consider the question of organizing an open Stock Board. The meeting was largely attended, and a Committee of nine gentlemen was appointed, who are to add to their number sixteen others from the best names proposed to them, and report, on Friday evening next a form of organization, by-laws, &c. The new Board will probably commence business with at least fifty members. The rules for admission to the present Board are very stringent, five black balls rejecting an applicant, and many respectable brokerage and banking associations have no representative there. Applicants for membership of the new board will have their request submitted to a Committee, and if reported favorably upon, will be admitted by a two-thirds vote. The sessions will be open to the public as spectators.

The earnings of the Erie Railroad for October are as follows:

October, 1862.....	\$910,885 22
October, 1861.....	719,354 03
Increase.....	\$191,531 19

Earnings of the Milwaukee and Prairie du Chien Railroad Company for the first week of November:

1862.....	\$35,332 85
1861.....	35,187 29
Increase.....	\$145 56

UNION PACIFIC RAILROAD COMPANY.

OPENING OF BOOKS OF SUBSCRIPTION.

Books of subscription to the capital stock of the Union Pacific Railroad Company will be opened on Wednesday, the 5th day of November, A. D. 1862, at noon, on the terms and conditions therein set forth, at the places and with the persons following, at their respective places of business.

Albany, New York.	Thomas W. Olcott.
Baltimore, Maryland.	Thomas Swan.
Buffalo, New York.	Dean Richmond.
Boston, Mass.,	Samuel T. Dana
Burlington, Iowa.	Lyman Cook.
Cincinnati, Ohio.	S. S. d'Hommedieu.
Columbus, Ohio.	Wm. Dennison.
Chicago, Ill.,	Wm. B. Ogden.
Cleveland, Ohio.	Amasa Stone
Concord, N. H.	Joseph A. Gilmore.
Cason City, Nevada Ter.,	Wells, Fargo & Co.
Detroit, Mich.,	Charles A. Trowbridge.
Dubuque, Iowa.	Platt Smith.
Denver, Col.,	George W. Clayton.
Hartford, Conn.,	G. P. Bissell & Co.
Indianapolis, Indiana.	James M. Ray.
Louisville, Ky.,	James Guthrie.
Leavenworth, Kansas.	Gen. J. C. Stone.
Milwaukee, Wisconsin.	Ed. D. Holton.
N. Y. City, New York.	Hy. V. Poor, at Office of Secretary.
Omaha, Nebraska Ter.,	Alvin Saunders.
Portland, Maine.	Charles E. Barrett.
Portland, Oregon.	Wells, Fargo & Co.
Providence, R. I.,	Walter S. Burryess.
Phila., Penn.,	Jay, Cooke & Co.
Pittsburg, Penn.,	Thomas N. Howe.
Rutland, Vermont.	Henry H. Baxter.
St. Louis, Mo.,	Wm. M. McPherson.
St. Paul, Minn.,	Parker Paine.
St. L. City, Utah.	Brigham Young.
San Francisco, Cal.,	Wells, Fargo & Co.
Trenton, New Jersey.	Philemon Dickerson.
Wilmington, Del.,	R. K. Robinson & Co.
Wheeling, Va.,	R. Brady.
Wash. City D. C.	R. W. Latham.

Said books of subscription will remain open on the terms aforesaid, for at least two weeks from and after noon of said 5th day of November, at the places with the persons above set forth.

By order of the Board of Commissioners of the Union Pacific Railroad Company. Office of Secretary, 54 William street.

WM. B. OGDEN, *Pres't.*

HENRY V. POOR, *Sec'y.*

THOS. W. OLCOTT, *Treas.*

Dated at New York, this 25th day of October, 1862.

Philadelphia, Wilm'gton & Baltimore RAILROAD!



FOUR PASSENGER TRAINS DAILY!

RAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11 P. M., Express.

On Sundays at 3.30, A. M., and 11 P. M. Leave Baltimore for the North and West daily, at 8.30, A. M., Express; 1.04, P. M., Express; 5.30, P. M., Mail; and 7.00 P. M., Express.

On Sundays at 7 P. M., only. Through connections made for all points at the North, East and West.

WM. CRAWFORD, Agent.

J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets

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CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANA POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS.

CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:00 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M. Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—6:30 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

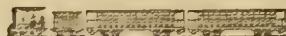
Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

Through Distance 280 Miles;

42 Miles Shorter than any other Route

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M. 7:00 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without rebilling or transshipment.

JOHN BRANT, JR., Superintendent.

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent.

33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON, STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and takes collections.

KNOX & SHAIN, Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums 419 by Franklin Institute.)

T. F. RANDOLPH & BRO, Mathematical Instrument Makers

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CINCINNATI O

BUSH & LOBDELL, Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

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TYRES,

FOR RAILROAD CARS

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LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled A

In the best Manner, at the Shortest Notice,

Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition
The well-earned reputation of this Road for
SPEED, SECURITY AND COMFORT
Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$1.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Baltimore, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

**NEW YORK, BOSTON,
AND ALL EASTERN CITIES,**

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

CHARLES MINOT, Gen'l Sup't

W. MORRILL.

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MORRILL & BOWERS,

(Successors to and members of the late firm of
C. WASON & CO.)

CLEVELAND, OHIO,

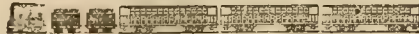
Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men the West that all work furnished by us shall be of the best quality, in style, workmanship and material. We are also prospectively solicited, with the assurance that we will be prepared to give entire satisfaction.

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM

PITTSBURGH to PHILADELPHIA

(with close connections from Western Cities.)

ALL CONNECTING DIRECT TO NEW YORK,

**THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE AND WASHINGTON.**

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (430 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM

PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.

BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburg with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburg.

CLARK & CO., Transfer Agents, Pittsburg.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

W. W. ALKMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.

CLARK & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

G. B. NEAL, Parkersburg, Virginia.

HALL & CO., Marietta, Ohio.

H. S. TIERCE & CO., Zanesville, Ohio.

MCDOWELL & McCORMICK, Portsmouth, Ohio.

E. McNEELY, Maysville, Ky.

J. P. JOHNSTON, Ripley, Ohio.

JOHN TODD, Covington, Ky.

G. L. HEATON, Cleveland, Ohio.

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Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for stock to New York [via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.

L. L. HOUTT, Gen'l Ticket Agent, Philadelphia.

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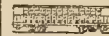
General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	6:30 A. M.	9:20 P. M.
Mail and Express.....	8:30 A. M.	6:20 P. M.
Columbus Accommodation.....	4:00 P. M.	11:05 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton.

RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:30 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:30 A. M.	11:40 P. M.
Cin. & Chicago Air Line Ex.....	8:00 A. M.	8:50 P. M.
Dayton and Richmond.....	8:15 P. M.	1:30 P. M.
Day. Toledo & Detroit Huntsville.....	5:20 P. M.	10:55 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	8:15 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:55 and
Eastern Night Express.....	10:00 P. M.	6:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	5:00 A. M.	12:20 P. M.
Indianapolis and Terre Haute.....	5:00 A. M.	12:20 P. M.
Decatur, Springfield & Quincy.....	13:45 A. M.	4:45 P. M.
Chicago Night Express.....	5:00 P. M.	10:40 A. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	6:00 A. M.	10:00 P. M.
Seymour Accommodation.....	2:00 P. M.	1:15 A. M.
Louisville and St. Louis Night Ex.....	7:10 P. M.	7:20 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots.

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

P. W. STRADER,
General Ticket Agent L. M. & C. X., and C. H. & D Railroads.

W. H. L. NOBLE,
General Ticket Agent Indianapolis & Cincinnati Railroad.

E. F. FULLER,
General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

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NEW YORK

ALBERT BRIDGES.

JOHN

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES
Tube CLEANERS, Steel Wire and Whalebone BRUSH-

Artesian Oil and Salt WELL TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enameled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warm-
ing Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Plaz-
as Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.
Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,
28 Platt Street, New York

N. W. BALDWIN, MATHEW BAIRD, M. W. BALDWIN & CO. ENGINEER'S

BROAD AND HAMILTON ST.-
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those
interested in Railroad Property, to their system of
LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for
which they may be required, by the use of one, two, three or
four pair of driving wheels; and the use of the whole, or
so much of the weight as may be desirable for adhesion;
and in accommodating them to the grades, curves, strength
of superstructure, and rail and work to be done. By these
means the maximum useful effect of the power is secured
with the least expense for attendance, cost of fuel, and re-
pairs to Road and Engine.

With these objects in view, and as the result of twenty-
six years' practical experience in the business by our senior
partner, we manufacture five different kinds of Engines,
and several classes or sizes of each kind. Particular atten-
tion paid to the strength of the machine in the plan and
workmanship of all the details. Our long experience and
opportunities of obtaining information enables us to offer
these engines with the assurance that in efficiency, econo-
my and durability, they will compare favorably with those
of any other kind in use. We also furnish to order Wheels
Axles, Bowling or Low Moor Tire (to fit centers without bo-
ring), Composition Castings for Bearings; every description
of Copper, Sheet Iron and Boiler Work; and every article
appertaining to the repair or renewal of Locomotive En-
gines.

CONTRACTS for Rails at a fixed price, or on com-
mission, delivered at an English port, or at a por-
United States, will be made by the undersigned
THEODORE DEHON,
no 1 10 Wal Broadway, New York

EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



LOCOMOTIVE & RAILROAD
CAR SPRING
MANUFACTURER,
WILMINGTON, : DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a good, LOW-PRICED FAMILY
MACHINE, have introduced a new style, working upon the
same principle, and making the same stitch, though not so
highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to ravel, and leaving no chain or
ridge on the underside, the economy of thread, and adap-
tability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

If Send or call for a circular, containing all particu-
lars, prices, testimonials, etc.
Feb 12.

WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

-AND-

Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly
on hand, painted, and ready for shipment, with
instructions for applying them. Give us your orders at
No. 66 West Third Street, Cincinnati, Ohio.
Spt. 2.

MOSELEY & CO.

JAMES FOSTER, Jr. & CO.,
MATHEMATICAL AND PHILOSOPHIC-
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S.W. CORNER FIFTH AND RACE,

Cincinnati, Ohio.

Drawing Instruments, Scales of all kinds, Barometers,
Thermometers, Spectacles, Microscopes, etc., always on
hand. Repairing attended to;

H. TWITCHELL.

JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.
Pennsylvania, are prepared to execute orders for Street and
other Rails on terms favorable to parties wanting to pur-
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FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,
Engine and Car Axles, Pump and Piston Rods
Bar of all Sizes,
And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron
hammered. The whole operation from ore to finished Iron
is conducted at our own Works June 9.

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness
the best and latest improved

COAL OR WOOD BURNING
LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

-AND ALSO TO-

Rebuild and Repair Locomotives.

The above works being located on the New York Central
Railroad, near the center of the State, possess superior
facilities for forwarding their work to any part of the coun-
try, without delay.

JOHN ELLIS, President.
WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boil-
er Flues—from 1¼ to 10 inches outside diameter, cu
to definite lengths.

Wrought Iron Welded Tubes—from ½ inch to
8 inches inside diameter, with screw and socket connec-
tions, for Steam, Gas Water, or other purposes, and fit-
tings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong
and durable, designed especial for Water purposes.

Cast Iron Gas or Water Pipe—¼ to 24 inch
diameter, and branches for same. &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS, CHAS WHEELER,
THOS. T. TASKER, JR., S. F. M. TASKER,
HY. G. MORRIS.

BUTLER'S

MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroad office
for the South and West. For sale by 1,000 leading Station-
ers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, NOVEMBER 27, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion.....	\$1 00
" " per month.....	3 00
" " six months.....	12 00
" " per annum.....	20 00
" column, single insertion.....	5 00
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" " six months.....	40 00
" " per annum.....	80 00
" page, single insertion.....	15 00
" " per month.....	25 00
" " six months.....	110 00
" " per annum.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—		
	Depart.	Arrive.
Cincinnati Express.....	6.30 A. M.	9.20 P. M.
Mail and Express.....	8.30 A. M.	6.20 P. M.
Columbus Accommodation.....	4.00 P. M.	11.05 A. M.
Morrow Accommodation.....	6.40 P. M.	8.00 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	8.00 A. M.	9.50 P. M.
Dayton & Sandusky.....	8.30 A. M.	6.45 P. M.
Dayton & Toledo.....	6.35 A. M.	11.40 P. M.
Richmond & Dayton.....	3.15 P. M.	6.45 P. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.55 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	8.15 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.55 A. M.
Eastern Night Express.....	10.00 P. M.	6.40 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	6.30 A. M.	6.45 P. M.
Dellefontaine Accommodation.....	5.20 P. M.	10.55 A. M.
Marietta & Cincinnati—		
Mail.....	9.00 A. M.	5.35 P. M.
Accommodation.....	3.30 P. M.	10.15 A. M.
Ohio & Mississippi—		
Mail.....	5.00 A. M.	10.05 P. M.
Express.....	5.00 P. M.	5.53 A. M.
Indianapolis & Cincinnati—		
Mail.....	6.00 A. M.	11.00 A. M.
Chicago Express.....	7.10 P. M.	9.20 A. M.
Dayton & Michigan—		
Toledo, Detroit & Chicago Exp.....	6.30 A. M.	11.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.55 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	8.00 A. M.	8.50 P. M.
Night Express.....	7.00 P. M.	8.15 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	10.00 A. M.	6.45 P. M.
Accommodation.....	6.00 P. M.	8.00 A. M.
Kentucky Central— (City time.)		
First Train.....	6.30 A. M.	10.44 A. M.
Second Train.....	2.20 P. M.	6.44 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

RECKLESS DISREGARD OF HUMAN LIFE.

A class of accidents is becoming quite common, which, from their utter needlessness, seems all the more appalling. We refer to accidents to railroad travelers from stones and other missiles projected intentionally or unintentionally at trains of cars from outside sources. We take the following statement of the latest one which has come to our knowledge from the *N. Y. Tribune* of the 25th.

A fatal accident occurred last Saturday evening, near Yonkers. A short distance below the depot at that station stands a large building, which was formerly used as a bedstead factory, but which now is occupied as barracks by a regiment from Westchester County. The building is between the river and the railroad track, being quite near to the latter. On Saturday afternoon, between 5 and 6 o'clock, a soldier was on guard or other duty within the building; wishing to be relieved for a few moments he called another to take his place, handing him at the same time his musket. The soldier who received the musket inquired whether it was loaded, and received a negative answer. To make certain he placed his mouth at the muzzle of the gun for the purpose of ascertaining whether a load was within by blowing through. As he was unable to force any air through, he concluded that the musket must either be loaded or very dirty, and to ascertain which was the case he placed a cap on the nipple, and, aiming the gun at random out of a window, he pulled the trigger. The musket proved to be loaded. Just as it was discharged, the train from New York came along, and the ball passed through a window on the side of the car, narrowly missing some gentlemen seated on the river side of the car. The noise was scarcely noticed. The ball struck a lady seated on the opposite side of the car and killed her instantaneously. So quickly did the messenger do its work that the victim did not utter a cry or make a sound. The fact of the lady's death was not known by those seated close by her at first. As the cars approached the depot, some one noticed the blood streaming from the face of the deceased, and that her head had fallen forward. Her body was removed from the cars to the depot, but life was already extinct, we believe, though the distance from the barracks to the station was not over a quarter of a mile. An inquest was held and it appeared that the deceased was a Mrs. Trainor of White Plains, New York. Her ticket was for Tarrytown. The friends of the deceased were notified of the accident and removed the body. The accident happened from gross carelessness on the part of the soldier who fired the musket. As long as there was a doubt in his mind whether or not it was loaded, he was inexcusable in pointing it in any direction in which its discharge could possibly bring danger to any one. When will people learn to take more care in handling firearms? We have gathered the above from many statements which were in circulation relative to the accident.

When a railroad traveler steps on board the train he necessarily assumes all the risks of accident incident to this class of traveling, and they are quite numerous enough to suit the fancy of timid persons, even when reduced down, by a rigid system of accountability, to the lowest point that can be attained.

Against all ordinary accidents, it seems possible to provide a safeguard in the care and watchfulness of employees. But here is a class of accidents that no care on the part of managers of railroads can prevent. Railroad managers can not overlook a whole country and set a watch against every careless or vicious man who chooses to hurl a rock or fire a gun in the direction of their track. The cure for this must lie in the civil community and not in the corporation of the company, and to this source we must look for a remedy. Hitherto too little attention has been paid to injuries willfully done by malicious persons to the railroad track for the purpose of producing accidents. Instances are known where a week's imprisonment or a fine of five dollars were adjudged sufficient punishment for the wretch who would endanger the lives of a whole train of innocent passengers to gratify a little spleen against the company. And we believe a case has yet to be found, where a man who by accidental carelessness endangers the lives of travelers has been punished at all. In the present instance a woman is the unsuspecting victim of the culpable carelessness of a man who professes to devote himself to the service of the community. The soldier wishes to know whether his gun is loaded or not, and because he does not choose to look where he is firing a human life is lost. We are far from desiring to punish such an offender as a malicious murderer, but in a question which involves so great a risk of human life, it becomes a serious consideration whether the civil law should not provide such a punishment as will deter careless men from endangering the lives of others. Certainly the innocent victim should not be the only sufferer in such a case. In our opinion this subject is one of the highest importance to railroad companies, and well worthy the attention of those interested in them. It is quite certain that if they do not make some effort to abate the evil, no other class will.

BALTIMORE AND OHIO RAILROAD

The annual meeting of the stockholders of this company was held in Baltimore, Nov. 17. There was a large attendance of stockholders and much interest was manifested. The report of the President was as follows:

"The stockholders of the Baltimore and Ohio Railroad Company will remember that the president and directors of the company were unable to make the usual statement of its affairs and condition at the annual meeting, held on the 18th day of December, 1861.

"Again, unhappily, the continuance of the war, involving great and repeated destruction of the works and property of the company, and frequent and present hostile occupation of important sections of the line, has precluded the president and directors from obtaining the information which, if in their

power, would be their duty to furnish to all interested in the road.

"Much effort has been made to close the business of 1861. A large aggregate of services for the Government for that period still remains unsettled. Arrangements have recently been made under which, it is hoped, those settlements will not be much further delayed.

"As soon as these revenue accounts can be adjusted, it is designed to submit a full report for that year.

"The attention of all the departments of the service of the company will continue to be directed to the procurement of requisite data as to the extent of the damages, condition of the works, machinery, etc., so that as early as practicable the report for the fiscal year terminating 30th September, 1862, shall be presented.

"During its protracted embarrassments and losses, the company has energetically maintained a most careful and economical system of management, which, in combination with its strong financial position at the commencement of its difficulties, has enabled it to meet promptly all its engagements, and to maintain its credit and the character of its securities at the highest standard.

"Whenever protection has been afforded, the company has with marked rapidity reopened its route. The entire road was restored and worked from April 1st to May 29th, and from June 9th to 5th September last.

"As indicating the vast uses and necessity to the country of this leading avenue of commerce from the valley of the Ohio to the seaboard, it is interesting to state that, upon the reopening of the road, the company announced a large reduction of the rates of transportation from western to eastern cities, and notwithstanding these lessened rates as compared with those charged by the other Atlantic lines during the blockade of the Baltimore and Ohio road, the revenue of the company for the month of July and August is estimated to have exceeded \$1,200,000, being the largest sum earned by the company, for the same length of time, since the construction of the road to the Ohio river.

"In consequence of its ability to thus work for a portion of the year, over its entire line, the company was enabled to pay its usual semi-annual dividends. And it is further satisfactory to state, on behalf of the board, that it has also fully maintained the sinking funds established for the extinguishment of its funded debt. The success of that system continues to be demonstrated—the sinking funds having been increased from \$1,356,371.35 on the 30th September 1860, to \$1,847,554.71 on the 30th September 1862, exhibiting the gain for two years of \$491,183.36.

"These results have been realized without any payment by the government for the losses and immense and repeated destruction of the property of the Company.

"The board having determined to replace the numerous wood and iron and wooden bridges which have been destroyed in the progress of the war with iron structures and the most substantial and improved description, the material was promptly secured, and a considerable portion of the work has been successfully accomplished in the shops of the Company.

"For the purpose of furnishing employment to the large number of faithful workmen of the company during a period of depression, as well as to maintain its capacity for extensive and effective action when the road should be restored to its normal condition, the full forces having been retained, and have been engaged in repairing and constructing locomotives, cars and requisite machinery.

Arrangements have been made, and no efforts will be spared again to re-open the line, whenever the opportunity is afforded, and with the required and newly constructed machinery, it is believed a very large business can, as heretofore, be successfully transacted.

The following gentlemen were elected directors for the ensuing year:

Johns Hopkins, Samuel W. Smith, Francis Burns, Wm. A. Hack, John Spear Nicholas, John Gregg, C. Oliver O'Donnell, James Harvey, Wm. Heald, Galloway Cheston, Wm. W. Taylor, Samuel Kirby.

The only change was the election of Samuel Kirby, Esq., in the place of Col. R. H. Miles, who, on account of removing to the country recently, resigned his position in the board.

PITTSBURGH, FORT WAYNE & CHICAGO R. R.

We are in receipt of the Winter Time Table of this road. It took effect Nov. 1. Two through trains leave Pittsburgh daily, (Sundays excepted,) for Chicago, at 1.40 P. M. and 1.50 A. M., arriving at Crestline at 10.00 P. M. and 10.15 A. M., and at Chicago at 10.20 A. M. and 10.50 P. M. A third train, via Crestline, leaves Pittsburgh at 8.00 A. M. and arrives at Crestline at 7.00 P. M. Two through trains leave Chicago daily, (Sundays excepted,) for Pittsburgh, at 7.20 A. M. and 6.50 P. M., arriving at Crestline at 8.50 P. M. and 6.50 A. M., and at Pittsburgh at 5.00 A. M. and 3.45 P. M. The third train leaves Crestline at 3.40 P. M. and arrives at Pittsburgh at 11.00 P. M. Freight trains leave Pittsburgh at 7.10 P. M. and 11.05, and arrives at Crestline at 4.50 P. M. and 6.00 A. M. and at Chicago at 11.15 P. M. and 11.50 A. M. The third train leaves Pittsburgh at 5.35 A. M. and arrives at Crestline at 8.40 P. M. Through Freight trains leave Chicago at 4.30 P. M. and 10.50 A. M. and arrive at Crestline at 7.00 P. M. and 1.40 P. M. The third train leaves Crestline at 4.30 A. M. and arrives at Pittsburgh at 3.30 A. M.

BUFFALO & STATE LINE R. R.

The Winter Time Table on this road went into effect Nov. 17. Three passenger trains and three freight trains go over the road each way per day. Eastward Passenger Trains leave Erie as follows: Night Express, 11.48 P. M., Mail and Accommodation, 6.00 A. M. Day Express 2.15 P. M. Westward Passenger Trains leave Buffalo as follows: Night Express, 11.30 P. M., Mail Accommodation, 4.10 P. M., Day Express, 11.00 A. M. Second Class and Freight Trains leave Erie Eastward at 5.30 A. M., 6.45 P. M., and 6.05 A. M., Leave Buffalo westward at 7.00 A. M., 4.15 P. M. and 8.45 A. M.

GENERAL RULES FOR RUNNING TRAINS.

The following general rules for running trains are printed on the time tables of the Pittsburgh, Fort Wayne and Chicago Railroad.

RULE 18. All trains approaching stations or sidings where another train of the same class, (passenger for passenger, and freight for freight) may be standing must do so with caution, and come to a full stop at the station, so that conductors can compare their time, and impart information, if any is needed.

20 Passenger trains will wait at meeting points twenty-five minutes for each other; when if either train is delayed beyond that time the other will wait five minutes more, making thirty minutes in all, then proceed, keeping precisely thirty minutes behind its own schedule time, until it has met and passed the delayed train. The five minutes are allowed for any possible variation of watches, and must not be used by the delayed train in approaching the meeting point, or any station where it expects to meet the opposing train.

Should both trains be delayed at the same time, and fail to reach the meeting point within the twenty-five minutes, they will each wait at the station where the other is due, according to the foregoing rule, thirty minutes behind the schedule time of the expected train; after which neither train can proceed, where there are curves in the road, or the weather is so foggy as to prevent an uninterrupted view of the track ahead for more than one-half mile, except by keeping a man at least 600 yards ahead, with danger signals; and, in no case must irregular passenger trains be run at a speed exceeding fifteen miles an hour on straight lines of one mile and over. When on curves or straight lines under one mile, their speed shall in no case exceed four miles an hour.

Risk of collision must at all times be avoided. Passenger trains will not wait for freight trains. Freight trains will wait indefinitely for passenger trains (unless ordered otherwise by the superintendent of the division in writing) and must be kept out of the way, giving them the road.

21. Freight trains will wait at meeting points forty minutes for each other, when if either train is delayed beyond that time, the other will wait five minutes more, making forty-five minutes in all, then proceed, keeping precisely forty-five minutes behind its own schedule time until it has met and passed the delayed train. The five minutes are allowed

for any possible variation of watches, and must not be used by the delayed train in approaching the meeting point or any station where it expects to meet the opposing train.

Should both trains be delayed at the same time, and fail to meet the reaching point, within the forty minutes, they will each wait at the station where the other is due, according to the foregoing rule, forty-five minutes behind the schedule time of the expected train, after which neither train can proceed, where there are curves in the road, or the weather is so foggy as to prevent an uninterrupted view of the track ahead for more than one-half mile, except by keeping a man at least 600 yards ahead with danger signals; and, in no case must irregular freight trains be run at a speed exceeding ten miles an hour on straight lines of one mile and over. When on curves or straight lines under one mile, their speed shall in no case exceed four miles an hour. Risk of collision must at all times be avoided.

RULE 24. For safety, when a train fails to make a meeting point, the train on time must allow five minutes for possible variation of watches, and must also run the first curve slowly, but no conductor or enginemen must take advantage of, or presume upon such delay. In all cases where trains become irregular, there will be no running at schedule rate to the next station.

RULE 43. Trains approaching a meeting point, will enter the side track at the nearest end, and under no circumstances (where the side track is connected at both ends) will they be allowed to back in from the direction and in the time of an approaching train.

DECISIONS BY THE COMMISSIONER OF INTERNAL REVENUE.

TREASURY DEPARTMENT,
OFFICE OF INTERNAL REVENUE, Oct., 1862.

DECISIONS.

The general principle of the Excise law is that each particular manufacture is taxed for its value, though materials used in its production are in themselves manufactures on which a duty has been previously made. This is true of shoes made from taxed leather, of engines made from iron, on which a tax has been paid, &c.

Where a manufacturer has goods on hand at the place of manufacture, but has not taken out a license, nor kept his factory in operation since September 1st, such goods are subject to duty whenever sold or removed from the place of manufacture.

Concerning the Tanning of Leather.—A tanner who receives hides from other parties (owners) upon an agreement to tan the same by the piece or by the pound, may remove the tanned leather, without inspection, to such owners whenever it is ready to go forward, having first obtained and filed at this office the written certificate of the Assessor and Collector of the District in which the tannery is situated, that in their judgment such removal will not be prejudicial to the just administration of the excise law: *Provided*, that every tanner so removing tanned leather shall make a monthly return to the Assessor of the District of the number and weight of the sides or pieces of leather so removed; and provided that he shall furnish to the Assessor monthly, the inspector's certificate of the weight and quality of the leather so removed during the preceding month, and that the tax shall be paid in the District where the tannery is situated.

In Reference to Tanning Leather and Making Shoes.—Tanning leather and manufacturing shoes are distinct branches of manufactures, and the product of each must be taxed, though the same person may be engaged in both branches of business.

The cutting of soles, however, as subjecting the material to no new process affecting its quantity, may be considered as part of the shoemaking, and exempt as such from taxation as a separate manufacture.

Finished or curried upper leather made from rough leather, upon which the tax has actually been paid, is not subject to any additional tax in consequence of such finishing or currying.

In Reference to the Place Where a Manufacturer's License Should be Taken out and the Tax Paid.—A manufacturer's license should be taken out in the District where the manufactory is situated. The taxes must also be paid to the Collector of the same District.

Goods sent by a manufacturing establishment to its agent are regarded as still in the factory. In such case the tax is due when the goods are sold, or removed from the Agent's hands.

A commission merchant can not be regarded as an agent; and whenever goods are removed from the factory and sent to a commission house they are at once liable to assessment.

In Reference to Goods Printed since Aug. 31, upon Cloths Manufactured Previous to Sept. 1.—Goods printed since August 31, upon cloths manufactured previous to September 1, on which no duty or tax has been paid, are liable to assessment for the present value of the goods.

The provision of sec. 75 authorizes an assessment upon the increased value only when the duty or tax shall have been paid before the cloths were so prepared or printed.

Manufacturers of rubber, oil and other cloth, using goods on which the tax has been paid, are liable to taxation only upon the increased value.

In Regard to the Tax upon Manufactures Produced since the 31st day of August, and Delivered under Contracts of Sale, Made prior to the 1st of July last.—The manufacturer will pay the duty upon such goods, without regard to the fact of such contract. The manufacturer will be authorized to collect of the purchaser the amount of the tax so paid, whenever satisfactory proof shall be furnished to the Commissioner of Internal Revenue that the contract was made prior to the 1st day of July last, and in good faith between the parties, and toward the Government, and that the taxes properly assessed upon such goods or manufactures, have been actually paid by the seller.

A manufacturer of any article for the Government must pay the tax as though he were selling to an individual.

In Reference to Manufactures of Clothing.—When persons receive from a manufacturer, of clothing, whether in the same town or at a distance, garments to be made, and when finished, to be returned to the manufacturer or owner as aforesaid, such persons may not be required to pay the tax of 3 per cent. on the value thereof; *Provided*, That at the request of the Assistant Assessor they make out a list subscribed and sworn to, which list shall contain the quantity of garments so made up, during each month, and, as near as may be, the value thereof together with the name and residence of the person for whom the labor

has been performed. Such list shall be transmitted, by the Assessor receiving the same, to the Assessor of the district wherein the owner of the goods resides, or has his usual place of business, to the end that the tax thereon due, under the excise laws, may be paid in the district where the actual owner's place of business is situated.

In Regard to Iron Castings.—All castings which are so well known, and so generally used, as to have a commercial value, must be taxed as manufactures when sold or removed.

Other castings made upon special order of a machinist, but which are not known to the trade as manufactures in themselves, are exempt, not being manufactures within the contemplation of the law.

Where a person makes castings only, he must pay the tax thereon. If, however, he manufactures castings, and uses them himself in the manufacture of other articles, the tax can be assessed only on the last. The right to levy the tax depends upon the fact of sale, or removal for sale or consumption.

In Relation to Partnerships.—Section 6 provides that any number of persons carrying on business in co-partnership may be licensed to transact such business at the place, and in the such manners specified in the license. In order that one license will avail for several persons or members of a firm, the Assessor must be satisfied:

1. That a legal and bona fide partnership exists, and not merely an arrangement or understanding by which to evade the full effect of the license law.

2. That the parties have a place of business, and only one place which is common to all.

3. That the alleged members are mutually responsible for the acts of each other, and that they jointly share the benefits and suffer the losses of a common business.

4. That the parties, on no occasion, transact business on private account in the branch for which the firm purports to have been organized.

In Reference to Lawyers &c.—A lawyer having taken out a license to practice law in a certain State, for one year, will not be permitted to remove (with the design of permanently locating) to another State, and practice his profession there, without first having taken out a new license in the State to which he may have removed. If, however, the office from which the lawyer removes, be taken by another lawyer, his license might be made available to the new comer, under Sec. 63.

A lawyer licensed to practice law in a certain State, or into another county of the same State, on a temporary employment to argue a cause, or to give advice to clients, without being required to take out a license in such State or county.

A lawyer who displays a sign at his residence and transacts business there, as well as at his office, must take out two licenses.

If a person holds out to the public by words, deeds, or writing, that he is engaged in any kind of business requiring license, he must take license therefor, although the business in question may not be his chief or exclusive occupation.

In Reference to Market Men and Other Dealers.—Generally, the business of one who keeps a stall in the market is that of a retail dealer. There are exceptions, however. The Assistant Assessor and Assessor must judge in each case. If the dealer sells chiefly or entirely to consumers, though he may often sell in the original package, he should be classed as a retail dealer. If on the other

hand his sales are generally in the original packages, or if it is his occupation to sell to those who buy to sell again, or if this part of his business is considerable, so much that he depends upon and procures stock with reference to it, he should be classed as a wholesale dealer, even though he sells at retail. The law contemplates sales at retail by wholesale dealers.

A dealer who sells soap, candles, starch, tea, or other articles, by the original package, or salt by the wagon load, &c., &c., to consumers, is not a wholesale dealer under the law, but if he sells to those who sell again, he will be required to have a wholesale dealers license. A furniture dealer who sells a bureau, sofa, or table, to customers for their own use, whether in the package in which he received it or not, is not a wholesale dealer.

In Reference to Collectors of Rents.—A person engaged in settling an estate, who collects rents, merely as an incident thereto, and not as an occupation, is not liable to a license as a Commercial Broker. If, however, he in any way indicates his readiness to engage in such business, and accepts it whenever offered, then he is liable to a license tax, under section 64, item 14. The amount of business actually done is not conclusive evidence upon the point. The main inquiry is, is it the person's occupation "to purchase, rent, or sell real estate for others?" Nor is it necessary that he should be engaged exclusively in this employment.

In Reference to Brokers and Bankers.—It is impossible to lay down an arbitrary rule by which to test a man's business, and decide whether he is a broker or a banker. The law is explicit. Assistant Assessors must exercise their best judgment, with the facts of each case in view. Parties who feel aggrieved can appeal to Assessors. If any attempt were made to decide in advance, such a decision would confuse the judgment of the local officers, rather than aid it.

Concerning Savings Institutions.—The tax of 3 per centum must be paid on all dividends declared due and payable after September 1st, 1862. The same tax must also be paid on all sums added to surplus contingent funds.

I am not aware of any provision of law by which proceeds of investments in railroad or bank stocks are exempt from taxation, when divided among policy holders or stockholders. I am of opinion that the tax must be withheld from all dividends and sums added to surplus funds, and the amount so withheld be paid over to the Government.

In Reference to Rectifier's License.—The basis for calculating the amount of license duty, that a rectifier of liquor is subject to, under the Internal Revenue Law, is, the number of barrels or casks, containing not more than 40 gallons each, produced by the process of rectification; and not on the quantity of proof liquor used. Rectifiers will keep a record of the quantity of liquor produced, and will be required to make a monthly return of the same to the Assistant Assessor, subscribed and sworn, and to pay the amount of license tax accrued thereon, when required by the Collector.

In Reference to Exportation of Distilled Spirits and Coal Oil.—Distilled spirits may be removed from the place of manufacture, for the purpose of being re-distilled for exports, and refined coal oil may be removed for the purpose of being exported, after the quantity of oil or spirits so removed shall have been ascertained by inspection, according to the provisions of the Excise Law, upon and

with the written permission of the Collector (see form No. 31) of the District, without payment of the tax thereon, previous to such removal. The owner thereof having first given bonds (form No. 32) to the United States with sufficient sureties in at least double the amount of said duty, to export said spirit or oil, or pay the duties thereon within a period not exceeding ninety days from the date of said bond.

This bond must be given by the owner of the spirit or oil, whether distiller or otherwise, and must be executed to the satisfaction of the Collector before the spirit or oil is removed from the premises where distilled or manufactured.

When a bond for export has been given and a permit granted, the spirits or oil may be exported from the specified port, without the intervention of the collector, under the Excise law, at such port.

In Reference to the Manufacture of Alcohol from Whisky, Distilled and Removed from the Place of Manufacture Prior to September 1st, 1862.—Alcohol manufactured from Whisky distilled prior to September 1st, 1862, and on which an excise tax has not been paid, will be subject to a duty of 3 per cent ad valorem.

In Reference to Sale of Liquors.—Alcohol or spirituous liquors of any kind, can only be used by an apothecary in compounding medicines.

When sold otherwise, he will be required to take out license as a dealer.

A license to wholesale liquors confers no authority upon the party holding such license to retail liquor. Nor does a license to sell liquor authorize the sale of any other kind of merchandise.

In Reference to Coal Oil Distillers—(Bonded Warehouse).—The owner or owners of any coal oil distillery may erect a warehouse, at his or their own expense, of materials to be approved by the Collector of the district. Said warehouse, when approved by the Collector, is hereby declared a bonded warehouse of the United States, to be used only for storing coal oil; and to be under the custody of the Collector or his deputy. The duty on the oil stored in such warehouse, shall be paid when and as the oil is sold, or removed from such warehouse for sale.

In Reference to Distillate (Granting Permits to Remove, &c.)—1. Collectors may grant permits to producers of coal oil, not refined, and known as "Distillate," to remove such distillate from the place of production for the purpose of refining the same elsewhere, upon the condition that the producer or owner first give bonds, to the satisfaction of the collector of the district where the same is produced, that the distillate shall be so refined, and the tax or duty thereon paid to the collector of the district where the same shall be refined. *Provided, however,* that the oil when refined may be bonded for exportation, under the regulations relating to the exportation of coal oil.

2. It shall be the duty of collectors and deputy collectors, before granting a permit for the removal of distillate, to cause the casks containing the same to be marked in such a manner that they may be identified; and the permit shall contain an accurate description of such marks, and a copy of the permit shall be transmitted to the collector of the district to which the distillate is to be removed.

Interpreting Section 77, in Relation to Carriages, Yachts, Billiard Tables, and Plate.—Sec. 77. The phrase "any person, or persons

owning, possessing or keeping, any carriage, yacht and billiard table," is to be interpreted as referring to three different classes of owners, viz: Such as possess any carriage; and as a second class such as possess any yacht; and as a third class such as possess any billiard table.

There is nothing in the wording of the law referring to plate that could lead to the inference that the tax upon it is to be made contingent upon the keeping of a carriage, yacht, or billiard table.

The tax of \$10 dollars upon billiard tables kept for use, as provided in Schedule A., does not apply to billiard tables kept for hire, and subjected to a license tax in Section 64, Article 20.

The phrase "kept for use," employed in reference to silver plate, is construed to except silver plate or ware "kept for sale," and also that which is in possession of a family, or its members as souvenirs or keep-sakes.

The plate properly taxable is that which has been purchased for the use of the family, or has been presented to the family, as a part of the household furniture, and as such is kept for use, whether for ornament or actual service. In the execution of the law, assessors are directed to allow owners of silver ware to have the same weighed and to make report thereof.

In Reference to Ship and Boatbuilding.—Vessels and steamers that are built and launched in the ordinary manner are exempt from taxation. Several of the articles of which the vessel is composed are considered as manufactures, and will be subject to duty. Nails, engines, copper, sails, cordage, &c., will pay duty as manufactures, when removed from the place of manufacture. If produced by the builder of the ship, he is to be treated as a manufacturer of such nails, engines, etc., and to be taxed upon the product. Boats propelled by oars are regarded as manufactures.

There may be vessels that would not be included in either of the specified classes, whose classification can not be anticipated, and which must be assigned to one class or the other, according to the facts.

Defining who Must Have a Peddler's License.—Dealers in ice, who supply customers from carts and wagons, collecting their bills monthly or at the end of the season, do not require a peddler's license for such carts and wagons, although occasional small sales of ice are made by such drivers. They do not travel from place to place for the purpose of selling, but to deliver what has been previously sold. The same rule applies to milk-wagons, grocers' wagons, bakers' and butchers' carts, used to deliver what was previously purchased or contracted for. It does not apply to bread, meat and fish carts, dealers in fruit and vegetables, owned or hired and run for the purpose of selling (peddling) their contents from house to house.

A farmer who sells the products of his farm by traveling from house to house, is not a peddler; but a person who buys and sells as an occupation, and does his business while traveling from house to house, or place to place, must take license as a peddler.

In Reference to Photographers.—Photographers may be allowed to travel from place to place, under license as photographers. Each license in this case should state the place of residence of the photographer and should specify that he is to travel.

In Reference to Where the License of Vessels Shall be Taken out.—The license of steam

and sailing packets as provided in Section 64, Article 11, must, in all cases, be taken out, and the tax paid by the person or firm having the care or management of the steamer or vessel specified in the law, at the principal terminus or landing thereof, whether such person or firm be known as owner or agent.

In Relation to Newspapers.—If weekly, tri-weekly, and daily newspapers are published in one office by the same parties, and are composed principally of the same matter, though the matter in them may differ to some extent, there can be no doubt that they are to be regarded as one paper and are liable to taxation, if their combined circulation exceeds two thousand copies.

The Returns of Railroads of Their Receipts for Transportation, Etc.—The returns of railroads of their receipts for the transportation of passengers should be made at their principal office or place of business. Where several roads are so united as to have but one office, the return may be made on the entire line at such office—although some of the roads are located wholly or in part within other collection districts.

The per centage is to be paid by railroads on receipts from transportation of troops, as well as from any other class of passengers.

In Regard to Auctioneers.—A regularly licensed auctioneer can sell the goods of a licensed dealer in such dealer's store; but he can not sell the goods, wares, &c., of an unlicensed dealer, who is subject to a license tax, at his (the dealer's) place of business, without being subject to the penalty.

An auctioneer can sell such goods as are not usually included in the stocks of dealers, wherever such goods may be situated, without taking special license therefor.

Stamp Tax on Express Receipts.—The item marked "Express," on page 39 of the Excise Law, was not intended to embrace the freight business of railroads and ordinary wagoners, but is limited to persons who are express carriers, and not merely common carriers, under the law. The distinction is very well known in practical business. The express carrier is usually expected to take the parcel, box or bundle, from the house or place of business of the consignor, to the house or place of business of the consignee, while a railway company receives and delivers goods only at its own stations.

In the absence of specific language in the statutes, authorizing the broader construction, I must hold, that persons and companies engaged in transporting goods over the country, as such business is usually performed by railroad corporations, are not liable to the payment of a stamp tax upon the receipt given for such goods. I am also of opinion that the first item in schedule B does not include such receipts for freight as are usually given by railway companies.

A receipt is no doubt, in a technical sense, an agreement or contract, but in the ordinary use of language this close construction does not hold. Had Congress intended to include receipts it would have been easy to have so provided in plain language.

Regulation in Regard to Insurance Companies.—1. Each insurance policy, whether fire or marine, must be stamped.

2. An open policy will require but one stamp, where the risks, entered under such policy, are all upon property shipped by or consigned or belonging to the policy holder.

3. Whenever certificates or other evidences of insurance are issued by the holder of an open policy every such paper must bear an appropriate insurance stamp.

4. Whenever an insurance company refunds to the holder of an open policy any part of the premium, because the policy has not been used in full, the amount so refunded may be deducted from the premium received during the quarter, and the tax to the Government may be paid upon the remainder. *Provided*, That this regulation shall not apply to money so refunded, on which the tax to the Government shall not have been previously paid.

5. Dividends paid by mutual Insurance Companies, in scrip or money, to the insured, upon expiring or expired policies, are subject to a tax of 3 per cent, under Sec. 82.

6. The agents of Insurance Companies, located within the United States, are not, in consequence of such agency, Commercial Brokers, nor do they appear to be taxable under the law. Foreign agents are taxable under Sec. 85.

In Regard to Stamps upon Instruments.—In stamping promissory notes, or other instruments requiring stamps under the provisions of the Excise Law, two or more of a smaller denomination may be used in numbers sufficient to amount to the sum of the stamp required; *Provided*, That they are of the kind denominated for the kind of instrument to which the stamps are applied.

Certificates.—A stamp will be required upon every certificate which has, or may have, a legal value in any court of law or equity.

Certificates, warrants, orders, and drafts, by one State officer upon another, for the purpose of carrying on the internal business of the Government are not subject to a stamp tax.

The same rule applies to the certificates, orders etc., of County, City, and town Officers.

Messages transmitted by telegraph and railroad companies, over their own wires on their own business, for which they receive no pay, are not taxable.

Extract from an Act Passed at the Second Session of the XXXVIIIth Congress, Chapter 163, Section 24, Approved July 16, 1862, Relating to the Validity of Unstamped Instruments Executed Previous to Jan. 1, 1863. Section 24.—*And be it further enacted*, That the 95th Section of the act entitled "An act to provide internal revenue to support the Government, and (to) pay interest on the public debt," approved July 1, 1862, be so amended, that no instrument, document, or paper, made, signed, or issued prior to the first day of January, 1863, without being duly stamped, or having thereon an adhesive stamp to denote the duty imposed thereon, shall for that cause be deemed invalid and of no effect. *Provided*, however, that no instrument document, or paper shall be admitted or used as evidence in any court, until the same shall have been duly stamped, nor until the holder thereof shall have proved to the satisfaction of the court that he has paid to the collector or deputy collector of the district within which such court may be held, the sum of \$5 for the use of the United States.

In Reference to Hearing of Appeals by Assessors.—Assessors are not to give fifteen days to each county, but only so much time after the expiration of the notice as may be necessary. Quite likely a day or two may suffice, as in some counties there may be no appeal. The hearing will be summary and brief. Counsel should not be allowed in ordinary cases to argue matters at length.

In Reference to Produce Dealers.—Persons

buying produce, butter, eggs, &c., and forwarding the same to wholesale or commission merchants, to be sold by them, are not subject to a license tax in consequence of such buying; *provided*, they buy for themselves. But if they buy for others they are liable to the license as Commercial Brokers.

Nurserymen and Tree Dealers.—Nurserymen are required to take out licenses as wholesale or retail dealers, as the case may be; and tree dealers who buy to sell again, if they peddle their trees, must take out licenses as peddlers and also as dealers, if they have places of business.

GIFFARD'S INJECTOR.

The apparatus described in the present paper was applied by the writer to meet the special requirements of the working of the portion of the Kippax Colliery, near Leeds, where it has been in constant operation for the last eight months. It is a self-acting apparatus for raising the water for drainage of a portion of the pit workings, and has completely answered its intended purpose; and a similar application may be of service in other special cases, where the cost of fuel is not a consideration, but a simple and inexpensive apparatus is required, not needing attendance in working. In the present case, a small portion of the colliery (about 2 acres) was required to be worked out, which was lying below the drainage level of the pit, and at a considerable distance from the shaft; and as the extent to be worked was so limited, it did not allow of the erection of a special pumping engine, and hand pumping was employed to raise the water a height of 27 feet to the upper level, which was drained by an engine. This mode of draining was continued for two years; two shifts, of two men each, being employed constantly at the last, with a 3 1-2 inch pump; but they were not able to keep down the water in the lower workings, as it had increased in quantity, and no other less expensive and more efficient means was required to enable the rest of the coal to be worked out.

An application of a Giffard's injector as an elevator was proposed and carried out by the writer. The steam pipe used was a wrought iron pipe, of 1 1-2 inches bore, with screwed joints. It was carried 60 feet from the steam boiler to the shaft, descended the shaft 243 feet, and then passed along an inclined heading 730 feet long, and falling 27 feet to the elevator, which took the water at that level and discharged it by an iron pipe of 2 inches bore carried a distance of 300 feet up another inclined heading to the main drainage level at a height of 27 feet above.

The elevator is fixed in a cistern sunk in the water, so that the inlet pipe is at the water level. The elevator is a modification of a small sized injector, made in the simplest form for the sake of cheapness. It consists of a fixed steam jet, with a brass nozzle of 5.16 inch aperture, fixed in a cast iron casing, without any means of altering the position, with the steam pipe connected at the discharge pipe at the bottom, the whole being closed without any overflow; the discharge aperture is tapped gradually in both directions to 3-8 inch bore at the throat.

In consequence of the great length of the supply steam pipe (1030 feet from the boiler to the elevator), provision had to be made for constantly carrying off the condensed water deposited in the pipe, in order to insure the

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N. Y. & Pa.	64	48	8	10,781,833	566,07	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling.	3,000,000	5			
Baltimore and Ohio.....	Md.		380	13,111,800						Mortgage.....	2,500,000	6	95	1885	
do do										"	700,000	6	84	1880	
do do										"	1,124,560	6	90	1875	
do do										"	1,000,000	6		1867	
do Washington Branch.....	Md.		30	1,050,000						1st Mortgage.....	791,000	7	55	1866	
Bellefontaine and Indiana.....	Ohio & Ind.		118	1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	2d ".....	160,000	7		1870	
do do															
Buffalo and State Line.....	N. Y. & Pa.	60	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.		75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.		96	3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	3,750,000	6	100	1864	
Central Ohio.....	Ohio.		137	In hands of Receiver.	3,673,000	1,126,458	597,633	71,350	Aug. 1, 1859	1st Mortgage.....	450,000	7	62	1861	
do do										1st ".....	800,000	7	80	1864	
do do										2d ".....	80,000	7	64	1865	
do do										3d ".....	950,000	7		1865	
do do										4th ".....	1,365,000	7		1876	
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,206	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d ".....	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.		222	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,400,000	7			
do do										2d ".....	1,535,000	7			
do do										3d ".....	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d ".....	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		194	2,297,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref. 1st Mor. & S. P.	1,250,000	7	101	Feb. & Aug. 1	
do do										Gen'l 1st Mortgage.	3,600,000	7	77	Feb. & Aug. 1	
do do										2d ".....	2,000,000	6	31	May 1.	
Chicago and Rock Island.....	Ills.		80	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	105	1870	
Chicago, Burlington and Quincy.....	"		88	4,889,340	4,814,515		1,314,428	761,830		Cons. 1st Mort. S. P.	2,172,000	8	110	1873	
do do										" 2d ".....	813,000	8	108	1890	
do do										1st Mor. Chi. & Aur.	390,000	7		1867	
do do										2d ".....	303,000	7		1869	
do do										1st "Cent. Mil. Tract	392,000	7		1864	
do do										2d ".....	245,000	8		1868	
Chicago, Iowa and Nebraska.....	Ind.		82	No report											
Cincinnati and Chicago Air Line.....	Ohio.		105	60	2,155,800	1,356,000	644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d ".....	950,000	7	100	1880	
Cincinnati, Hamilton and Dayton.....	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d ".....	532,000				
do do										3d ".....	104,000				
do do										Income.....	305,509				
Cleveland and Mahoning.....	Ohio.		68	1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	60		
do do										2d ".....	479,000	7			
do do										3d ".....	341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.		40	196	In hands of Receiver.	4,918,325	653,821			1st Mortgage M. L.	800,000	7	100	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7	96	1873	
do do										3d " 2d Ex.....	1,165,000	7	81	1865	
do do										4th " 3d Ex.....	1,154,000	7	75		
Cleveland and Toledo.....	Ohio.		67	148	3,343,800	3,850,670	196,413	919,971	May 31, 1861.	1st Mor. Jan. 1st Div.	359,000	7	103	1867	
do do										1st " " 2d Div.	263,000	7		1872	
do do										2d " ".....	265,000	7		1862	
do do										1st " Tol. Nor. & Clew	521,000	7		1863	
do do										2d " ".....	293,300	7		1861	
do do										Junction Income..	44,500	7		1862	
do do										C. & T. Income..	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.		136	135	4,746,100	519,000	4,201	1,255,003	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"		135	98	3,000,000	1,602,000	none	1,063,405	Nov. 15, 1860	1st Mortgage.....	564,000	7	106	1861	
do do										2d ".....	303,000	7		1862	
Columbus and Xenia.....	Ohio.		115	54	1,490,000	290,700	50,500	See L. Miami.		Dividend.....	272,700	7	100	1860 to 1866	
Columbus, Piqua and Indiana.....	"		103	In hands of Receiver.	2,512,000		292,267	375,002	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"		142	2,176,666	2,512,000		292,267	375,002		2d ".....	2,212,000	8			
do do										1st Mortgage.....	300,000	7	50		
Dayton and Western.....	Ohio.		38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	2,500,000	7	90	1875	
Detroit and Milwaukee.....	Mich.		186	No report						2d ".....	1,050,900	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.		111	No report											
Dubuque, Marion and Western.....	Ohio.		36	469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Eaton and Hamilton.....	Ind.		132	986,061	1,219,100	249,868	124,140								
Evansville and Crawfordsville.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
Fox River Valley.....										2d ".....	184,000				
Galena and Chicago Union.....	Ills.		82	121	6,028,300	3,524,200	none	1,462,752	Dec. 31, 1860.	1st Mortgage.....	1,993,000	104		1862 & 1863	
do do										2d ".....	1,320,000	100		May 1, 1875	
Great Western.....	Ills.		175	1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.		64	400,000	No report	75,000	63,141	13,573		Land Mortgage...	5,000,000				
Greenville and Miami.....	Mo.		32	300,000	473,000		996,907	512,933	Sept. 1, 1860.	Mortgage Conv.....	1,354,000		50		
Hannibal and St. Joseph.....	Conn.		62	2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	927,000	6	30	1873	
do do	N. Y.		75	144	3,758,466	9,107,000	182,106	2,047,145	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	115	1869 & 1870	
do do										2d S. F.	2,000,000	7	103	1870	
do do										3d ".....	1,840,000	7	101	1875	
Illinois Central.....	Ills.		76	455	15,654,980	15,672,240	2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	28,000	7	108	1868	
do do										Construction.....	12,885,000	7	109	1875	
do do											4,115,000	6	97	1875	
do do										Debentures.....	42,740	7	96		
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000	10			
do do										2d ".....	578,000	10			
do do										Income.....	38,700	11			
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000	7		1866	
do do										2d ".....	400,000	7			
do do										Real Estate Mori..	200,000	7	90		
Indianapolis Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	1st Mortgage.....	649,984				
do do										2d ".....	314,000				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report								
Iron.....	Ohio.		13	118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock	Len. of R. & D.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.	86		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,015,907	681,000		302,066	123,797	Dec. 31, 1860.	1st ".....	249,000	7	75	1861
do										2d ".....	392,000	7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st ".....	260,000	7		
do										2d " Conv.	1,000,000	7		
do										3d ".....	600,000	7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	903,000		89	
do										2d " E. D.	1,000,000			
do										1st Land Grant W. D.	4,000,000		21	
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.	29		514,433	130,000		105,944	43,267	June 30, 1861	1st Mortgage.....	130,000	6		
Little Miami.....	Ohio.	65					1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000	6		1883
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		245,910	98,679	June 30, 1861	1st Mortgage.....	218,000	7		
do										1st ".....	2,000,000	7		
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000			
do										1st " Memphis Br.	500,000			
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861
Marietta and Cincinnati.....	Ohio.	208		8,561,213	190,468	103,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868
do										2d ".....	2,000,000	7		
do										3d ".....	1,500,000	7		
do										Sterling Income.....	333,000	4		
Michigan Central.....	Mich.	88	284	6,057,784	7,968,429	125,000	2,126,699	910,169	May 31, 1861	Domestic.....	928,617	6	98	1872
do										1st Mortg. Sterling	467,483	8	84	1869
do										1st " Conv.	500,000	8	96	1860
do										1st " unconv.	250,000	8	106	1869
do										1st " Dollar Conv.	2,598,000	8	112	1882
do										1st " S. F. Conv.	4,153,000	8	108	1860
Michigan South'n & North'n Indiana	Mich. &	40	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. So.	991,100	103		1861
do										" Nor. Ind.	985,000	100		1868
do										" Goshen Line.	1,168,100	103		1863
do										S. F. Toledo.....	2,850,000	103		1885
do										2d Mortgage.....	2,465,000	93		1877
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d ".....	200,000	7		
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8		
do										2d ".....	600,000	8		
Milwaukee and Prairie du Chien.....	Wis.	34	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	104	1891
Milwaukee and Western.....	Wis.	71		No report						1st Mortgage Conv.	1,000,000	7		
Mississippi and Missouri.....	Iowa,	35		No report						2d " S. F.	400,000	8		
do										Oskaloosa Div.	1,425,000	7		
do										Land Grant.....	7,000,000	7		
New Jersey.....	N. J.	34		4,397,808	688,000		999,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000	109		
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	3,000,000	106		
New York and Erie Pref.....	N. Y.	90		Sold under mortgage			5,390,916	1,979,408	Sept. 30, 1860	2d ".....	4,000,000	110		
do		63								3d ".....	6,000,000	107		
do										4th ".....	4,900,000	100		
do										5th ".....	1,792,500	100		
New York and Harlem Pref.....	Conn.	48	138	5,717,190	6,055,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	109	1873
do		21								2d ".....	1,000,000	7	105	1864
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	7	94	Dec. 1, 1866
do											973,000	6		Oct. 1, 1873
New York Central.....	N. Y.	104	558	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.	7,925,000	6	106	May 1, 1873
do										Mortgage.....	3,000,000	7	109	June 15, 1864
Northern Central.....	Md.	138		2,260,000	5,890,300	537,928	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,086,500	6		1885
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6		
Ohio and Mississippi, Eastern Div.	Ohio & Ind	192		Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6		
do										2d ".....	316,995			
do										Construction.....	4,637,020			
Ohio and Mississippi, Western Div.	Ills.	148			3,292,403		No report			Income.....	3,591,185			
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000	6		
do										" S. W.....	2,800,000	6		
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	Construction.....	4,500,000	6	104	1888
do										1st Mortgage Conv.	4,900,000	6	98	1875
do										2d ".....	2,319,000	6		1875
do										2d " Sterling.	1,937,440	5	89	
Peru and Indianapolis.....	Ind.	74		1,100,000	320,000	80,000	No report			State Works.....	7,200,000			
Philadelphia, Wm. and Baltimore.....	Del.	98		5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6	90	1884
do										Improvement.....	119,000	6		1863
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	53	467	Sold for Floating Debt.	10,192,155	1,757,973	2,333,353	761,555	June 30, 1861	1st Mort. O. & P.	1,600,000	7	105	1865
do										2d ".....	750,000	7	92	1866
do										1st " O. & I.	1,000,000	7		1872
do										2d ".....	380,000	7		1873
Pittsburgh and Connellsville.....	Pa.	49		1,755,896	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000			
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.					
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1866
do										".....	997,000	7		1866
do										".....	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1866
Seaton and Hocking Valley.....	Ohio.	56		401,975	500,000	100,000	110,200	53,100						
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000			
do										2d ".....	450,000			
Staubenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d ".....	900,000	7		1865
Terre Haute, Alton and St. Louis....	Ills.	208		No report						1st Mortgage Conv.	1,000,000	7	98	1862
do										2d " Conv.	2,000,000	7	78	1868 & 1870
do										1st " Bel. & Ill.	517,000	7		1873
Terre Haute and Richmond.....	Ind.	105	73	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	106	1866
Toledo, Wabash and Western.....	Ohio & Ind	35	243	2,123,606	5,990,049	52,380	233,546			1st Mortgage.....	3,400,000	7	98	Aug. 1, 1865
do		78								2d ".....	2,500,000	7	80	Nov. 1, 1878
do										Mort. Coupons....	94,049	7		1860 to 1865

elevator being constantly supplied with tolerably dry steam, as the entrance of water with the steam would stop its action. This is affected by passing the steam through the top of a depositing box, 10 inches diameter and 3 feet deep, from the side of which the water flows off into a self acting water trap. This trap consists of a closed cylinder containing a copper cylindrical float, 8 ins. diameter and 8 ins. deep, open at the top, and guided by a centre tube sliding up the small pendent pipe. This pipe is prolonged outside over the side of the vessel, and serves as the discharge for the accumulated water; its lower end is closed by a small conical valve fixed on the bottom of the copper float, which keeps it closed until the water has accumulated in the trap outside the copper float so much as to flow into the float and sink it. The conical valve is thus opened, and the water contained in the float is expelled through the discharge pipe, by the pressure of steam upon its surface; the float again rises and closes the pipe ready for another charge.

The temperature of the heading, through which the steam pipe is carried, is about 72° Fah., and the steam pipe is clothed for about one third of its length, throughout the portion from the boiler to the bottom of the shaft, with a coating of tarred felt wrapped round it, and the remaining portion in the pit is wrapped with haybands. But with the great length of the pipe (1030 feet), and its small diameter of 1.2 inches, this clothing is not sufficient to prevent a very considerable amount of condensation taking place, and there is a constant discharge from the water trap of about 3 gallons per hour during the working of the elevator, a discharge taking place at successive intervals of about a quarter of an hour. This serves quite efficiently for keeping the steam supplied to the elevator free from water, and the elevator continues working uninterruptedly for many hours together. When the supply of drainage water is sufficient, it works continuously day and night without stoppage; it does not require any attention in working; and is started simply by turning on the steam at the boiler at top, when the elevator starts working at once. There is no valve in the discharge pipe, so that the pipe becomes emptied each time that the elevator is stopped working, the water running back through the instrument, and out at the inlet pipe: there is consequently no pressure of water to be overcome at starting; and the elevator always starts working at once, when the supply water is up to the level of the inlet, but not if the water has to be lifted in the inlet pipe. All that is required in starting the elevator afresh is to blow through, by turning on the steam for two or three minutes to warm the pipes; and then, after shutting off the steam for a few seconds to allow the condensed water to drain off, the apparatus is started at once in full work by turning on the steam again.

When the apparatus was first set to work, the depositing box had not been applied, and the action of the elevator was soon stopped by an accumulation of rusted scales from the interior surface of the wrought iron steam pipe. But the addition of the depositing box has never required opening during eight months it has been in work.

The pressure of steam at which the elevator is regularly worked is 34 lbs. per square inch above the atmosphere at the instrument, and it will keep working down to about 28 lbs. pressure, when it stops. A difference of pressure of 13 lbs. per inch constantly exists between the two ends of the steam pipe—the working pressure in the boiler being 47 lbs.

per square inch, in consequence of the large condensation in the pipe, and the resistance caused by its small diameter. The elevator accordingly stops working when the boiler pressure is lowered to about 40 lbs. per inch.

The temperature of the delivery water at the further end of the discharge pipe is 94°, that of the supply water being 58°; and the quantity discharged by the elevator is 780 gallons per hour, raised a height of 27 feet. The consumption of rough coal slack, for generating the steam supplied, is about 1.2 cwt. per hour; the boiler is a plain cylindrical one, 4 feet diameter and 30 feet long, with oven setting; and supplies steam also to the winding engine for the pit; but its consumption of fuel was taken separately in the night, when supplying steam to the elevator alone, the fuel being only refuse of slack from the pit, of a very inferior and dirty description, for which there is no other use. Consequently, the only expense incurred in the drainage of the workings by the elevator, besides the little extra wear of the boiler, is the cost of attendance for firing the boiler about once per hour during the night, when the winding engine is not required to be worked. There have been no expenses for repairs of the apparatus, the elevator never having been opened since first put in its place, except on the occasion previous to adding the depositing box soon after starting, as before mentioned.

The following are some of the cases where the elevator seems to be applicable with advantage. Where fuel is very cheap, as at a pit's mouth, and where the small coal is burnt simply to get rid of it. Where steam is blowing to waste, as it forges at night, when the production of steam continues without occasion for its use to the same extent as in the day and often its blowing off at night is a nuisance: this application of the elevator has been made at Messrs. Sharp, Stewart & Co.'s works, at Manchester, to fill up the tanks during the night for the day's supply, by making use of the waste steam previously thrown away. Where warm water is of value in the top cistern, as in the case of railway tanks and some factory purposes. Where the supply is seldom needed, and it is desired to save the first cost and maintenance of a pumping engine, and also the attendance of an engine-man. Where absolute certainty of having the water lifted is required, over and above all considerations of expense, as in keeping the tuyeres of a blast furnace cool; Messrs. Schneider, Hannay & Co., of the Ulverstone Hamatite Iron Works, are arranging to attach elevators to supply the cisterns that furnish the water to the tuyeres of their blast furnaces, being unwilling to depend on their pumps, which sometimes fail, whereas the elevator never fails; in this instance, also, there is an abundance of steam raised by the heat of the waste gas. Where frosts prevail, and pumps suffer from ice, the elevator, like the injector, gets itself into working upon the admission of steam, even when the whole instrument is a mass of ice, the heat of the steam gradually thawing the entire mass without the possibility of doing harm. Where the boiler is far removed from the elevator, as in the case of the drainage of colliery workings described in the present paper: with the elevator no attendant need be sent to start it or mind it.—*London Journal of Arts.*

The receipts of the Harlem road for the month of October are as follows:

1861	\$91,857 90
1862	107,092 76
Increase	\$9,234 88

MARQUETTE AND ITS PRODUCTIONS.

From Clark's Gazetteer, for 1862-3, we quote the following: Marquette is the county seat of Marquette county. It is a thriving town of nearly two thousand inhabitants, has three iron companies now in operation, viz: "Cleveland," "Jackson," and "Lake Superior," having an aggregate capital of \$1,100,000. A railroad twelve miles long extends from the port back into the mining regions. Its harbor is commodious and at a comparatively trifling expenditure may be made entirely safe in all weathers. Its leading exports are iron ore from the mines on the line of the Bay de Noquet and Marquette railroad, and charcoal pig metal from the furnaces of the county. The docks belonging to the iron ore companies, arranged with special reference to shipping ore, arrest attention as the village is approached from the lake. The most northern, belonging to the Jackson Iron Company is 800 feet long, and 40 wide, and divided into fifty-one sections, each fifteen feet by forty; 30,000 tons of ore can be stored upon it. The eastern end of the dock is protected by a breakwater 486 feet long and 42 wide, running at right angles to it from the north shore of the bay. The western end of the dock is connected with the shore by a bridge 1,200 feet long, on which a railroad track is laid, which is also continued to the end of the dock, the ore is thus deposited on the dock directly from the cars. Four or five vessels may be loaded here at the same time.

The Lake Superior Iron Company's dock lies next south, and the Cleveland Iron Mining Company's next below it. These latter are arranged with trestle work, pockets and shutes, so that the ore is loaded directly from cars into vessels. The Lake Superior Company's dock is 650 feet long, and 70 wide; the trestle work upon it, upon which the railroad track is laid, is twenty-two feet high and twenty-two feet wide, containing twenty-seven pockets for delivering ore to vessels, and eight to steamers, which hold, when full 1,100 tons. The Cleveland Company's dock is 650 feet long and 100 wide; and its trestle work is twenty-two feet high and twenty-five wide. This dock has twenty-two pockets for delivering ore to vessels and six to steamers, holding 1,200 tons. At each of these docks three vessels may be loaded easily in a day. The Bay de Noquet and Marquette railroad over which, the ore is transported from the mines, and of which Marquette is the northern terminus, has an equipment of four locomotives and 350 freight cars, with a carrying capacity of 2,500 tons a day. It has its shops, foundry, etc., at this place. The road has a grant of public lands of six sections to the mile; when completed, it will give railroad communication through to Lake Michigan.

The well known iron mines of the Jackson Iron Company, the Cleveland Iron Mining Company, and the Lake Superior Iron Company, are situated upon this road; the first fourteen miles, the second sixteen miles, and the latter seventeen miles from Marquette. They are upon the dividing ridge between Lake Superior and Lake Michigan, between 850 and 900 feet above the level of Lake Superior. The ore is an igneous product which has been forced up from below the slate and trapean rocks of the azoic system. It is a specular oxide of great purity; an inexhaustible quantity of it can be obtained, yielding from sixty-five to seventy per cent. metallic iron.

The receipts of ore and pig metal by rail road at Marquette, (which will be equivalent to the shipments from the ports,) since 1858, have been as follows:

	Pig Iron.	Iron Ore.
1858.....	1,627 tons,	30,551 tons
1859.....	4,383 tons,	83,578 tons
1860.....	3,500 tons,	150,015 tons
1861.....	6,325 tons,	50,020 tons
1862 Est. amt.....	9,000 tons,	160,000 tons

The shipment of 1861 was small, in consequence of the derangement of the iron business by the war.

MONETARY & COMMERCIAL.

There have been no very startling features in the aspect of monetary affairs during the week. No great events in the war have happened, although expectation was all on tiptoe from the promise of a battle at Fredericksburg. The realization of this was spoiled by advent of some ordinary winter weather down there, which to a great extent impeded the march of the army, and admonished the generals that what they do this year must be done shortly. It is hard to make up in the few favorable weeks of early winter for the lost good weather of the year. It is quite problematical whether the army of the Potomac under its new leader will be able to accomplish any very great results this year. If it does not, it should be ready to take the field as early in the spring as the condition of the roads will permit.

The European news shows that the late exploits of the C. S. Navy, as represented by the No. 290, are properly appreciated by those who fitted her out. The gallows erected to hang Mordecai, has proved the instrument of torture to Haman. We who can look at this distance may be permitted to apply to the case some wholesome common sense notions such as these. If privateering is piracy, does not the nation that allows privateers to be fitted out in her ports encourage actual piracy on the high seas. Can such a nation justly complain at the loss of her property by pirates. Could she expect that those who had proved traitors to their own government would keep any better faith with foreign ones. These are all very pertinent questions, and are beginning to be answered by the English press in a manner entirely different from the view given before the "brilliant exploits of the '290.'"—As a specimen of the present views of the English press, we extract the following from the London *Morning Star*.

"This Alabama and her sister furies are no better than corsairs. They are designed for a species of service now disclaimed and condemned by all civilized nations. The maritime powers of Europe have denounced privateering. * * * All other communities have grown ashamed of the perpetration in war of wanton, useless barbarities. There is no navy, no army, no nation in the world, but those 'created' by Jefferson Davis, that would sully its flag by association with false colors and the commission of brutal crimes."

The London *News* thinks that the English Government should either arrest the building of the other C. S. vessels, or abandon its position of neutrality.

Another and equally important item of news by late arrivals is, that England has declined to accede to the invitation of France to tender a joint mediation of the two countries for the settlement of our difficulties.

Prominent among the discussions of the Eastern papers are financial schemes for the advice of Mr. Chase.

"The 'New Plan of Public Credit and Currency,' emanating from the 'Merchants and Financiers' of New York, proposes a Government issue of coupon bonds, bearing 4½ per cent. interest, twenty years to run, of the denomination of \$20, \$50, \$100, \$500, \$1,000 and \$5,000; and to make them a legal tender for all debts public and private.

"To retire all the present irredeemable paper money, except notes below \$20, which shall be redeemed in specie; and it is believed that the Government can resume specie payment in ninety days after the first issue of the bonds, and that the public will absorb \$1,000,000,000 of them in six months, as they will displace bills of exchange, bank credits, and private acceptances."

In the argument in favor of this plan they state that of the \$500,000,000 of war bonds, but \$68,000,000 have been taken. That by making the bonds of the various denominations a legal tender, they will be hoarded in place of coin, and that the rate of interest, 4½ per cent., will be a saving to the government, and is still as great as the average earnings of capital. The subject is eliciting much discussion and many able opinions.

There has been a moderate demand for exchange during the week. Rates are at the old standard. Gold has declined somewhat. The latest quotations in New York are 130. The quotations in our market are as follows:

	Buying.	Selling.
New York.....	½ dis.	par
Philadelphia.....	½ dis.	par
Boston.....	½ dis.	par
Baltimore.....	½ dis.	par
Gold.....	27 to 28 prem.	30 to 31 prem.
Silver.....	18 to 23 prem.	25 prem.
Demand Notes.....	22 to 24 prem.	....

Notwithstanding the high price of gold, the banks of New York continue to hold an enormous amount, as will be seen by their last weekly statement as follows:

	Nov. 15.	Nov. 22.
Loans.....	\$178,796,633	\$176,589,387
Specie.....	39,348,917	38,110,215
Circulation.....	9,840,991	9,803,026
Deposits.....	104,066,604	159,325,831

The pork trade has been quite active during the week, although the early days were unfavorable. The total receipts of the week as footed up in the *Price Current* were 57,919. Prices range from \$4.25 to \$4.60. Mess Pork has been in good request at \$10.75 for City brands, to \$10.50 for country. Green meats sell as follows: Shoulders 3 to 3½c; Sides 5 to 5½c; Hams 5½ to 5½c.

The October statement of the Illinois Central Railroad is as follows:

LAND DEPARTMENT.

Acres Construction Lands sold..	2,918.24	\$31,665 82
Acres Int. Lands sold.....	247.0	2,098 11
Acres Free Lands sold.....	2,000.53	24,293 92
Total sales in Oct., 1862....	5,166.12	\$58,057 85
To which add town lot sales....	....	229 00

Total of all..... \$58,286 85

Acres sold since Jan. 1, 1862....	85,397.44	\$753,557 00
Acres sold previous (net sales)...	1,260,273.45	16,147,883 91

Total..... 1,345,670.90 \$16,901,540 91

Construct'n bonds canceled prev. to Sept. 30..	\$2,231,000 00
Cash collected in Sept.....	73,014 16
Net collections to Sept. 30, 1862.....	4,457,263 05

TRAFFIC DEPARTMENT.

Receipts from Passengers.....	\$137,750 49
Receipts from Freight.....	230,514 55
Receipts from Mails.....	6,358 34
Receipts from Rent of Road.....	5,333 33
Receipts from other sources.....	5,400 00

Total receipts month of October, 1862.... \$285,356 71

Total receipts month of October, 1861.... 284,020 50

The receipts of September and October were \$785,791, against \$573,882 in 1861—an increase of \$211,909 in two months.

Earnings of the St. Louis, Alton and Terre Haute Railroad for the month of October, 1862:

From Passengers.....	\$33,849 60
From Freight.....	81,594 82
From Mails, Express, &c.....	3,445 84

Total..... \$118,837 26

October, 1861..... 74,139 92

Increase in 1862..... \$44,747 44

For the first week in November, the earnings were, in

1862.....	\$28,856 35
1861.....	16,167 11

Increase in 1862..... \$12,69 24

The earnings of the Hudson River Railroad for the month of October were:

1862.....	\$239,910 86
1861.....	173,260 89

Increase..... \$66,649 97

The earnings of the Chicago and North-Western Railway for the second week of November were:

From Passengers.....	\$8,302 51
From Freight.....	17,584 22
From Mails and Express.....	645 70

Total..... \$26,532 43

Same week in 1861..... 18,182 89

Increase..... \$8,413 54

Increased earnings in two weeks, nearly.. 19,000 00

The business of the Philadelphia and Reading Railroad for October was as follows:

	1862.	1861.
Received from Coal.....	\$356,168 92	\$197,343 50
Received from Merchandise....	52,39 98	40,332 29
Received from Travel, &c.....	57,367 74	38,033 10

Total..... \$466,876 64 \$276,203 91

Transportation, roadway dumpage, renewal fund, and all charges.....	181,502 84	123,419 11
---	------------	------------

Net profit for the month..... \$282,170 80 \$152,789 80

Net profit previous 10 months.. 1,529,919 33 1,134,321 54

Total net profit 11 months \$1,812,109 23 \$1,287,311 31

The earnings of the Illinois Central Railroad for the second week in November, were:

1862.....	\$107,014 08
1861.....	62,067 65

Increase..... \$44,946 43

The approximate earnings of the Pittsburgh, Fort Wayne, and Chicago Railway during the month of October ultimo, compared with the same period of last year, were as follows:

	1862.	1861.	Increase.	Decrease.
Freight.....	\$245 175 84	\$206,261 27	\$39 517 77	....
Passengers...	137,093 24	124,867 60	12,225 64	....
Express.....	2,659 14	2,905 25	....	\$246 11
Mails.....	7,825 00	7,825 00	....	....
Rent of Rail'y..	7,083 34	7,023 79	60 55	....
Miscellaneous..	812 50	3,139 52	....	2,377 02

Total....\$401,349 00 \$352,071 43 \$49,177 63
 Earn. fr. Jan. 1,
 to Sept. 30..2,608,696 66 2,074,908 22 533,728 44

Tot. to Oct. 31 \$3,009,945 72 2,427,039 65 582,906 07.
 Increase for October, 14 per cent.; increase to October 31, 24 per cent.

The earnings of the Toledo and Wabash Railway Company for the second week of November were:

	1861.	1862.
Passengers.....	\$3,585 60	\$5,458 40
Freight.....	28,739 95	33,237 08
Total.....	\$32 125 55	\$38,695 48
Increase.....	.....	\$6,369 93

The earnings of the St. Louis, Alton and Terre Haute Railroad for the second week of November, 1862, were:

From Passengers.....	\$5,921 07
From Freight.....	21,112 30
From Mails and Express.....	694 00

Total.....	\$27,727 37
Same week in 1861.....	16,030 01
Increase.....	\$11,697 36

The traffic of the two weeks in November has been:

1861.....	\$55,699
1862.....	31,682

Increase in two weeks (80 per cent.)... \$24,017

HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

Carriage, Tire, Machine, Plow, & all kinds of

SCREW BOLTS,

Nos. 535 & 537 Central Avenue.

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BRIDGE BOLTS, Rivets of all sizes, Coach Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov. 27, 1y

Philadelphia, Wilm'gton & Baltimore

RAILROAD!



FOUR PASSENGER TRAINS DAILY!

RAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11, P. M., Express.
 On Sundays at 3.30, A. M., and 11, P. M.
 Leave Baltimore for the North and West daily, at 8.30, A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail; and 7.00 P. M., Express.
 On Sundays at 7, P. M., only.
 Through connections made for all points at the North, East and West.

WM. CRAWFORD, Agent.

J. T. CRAPSEY,

ATTORNEY AT LAW,

—OFFICE—

N. W. Cor. Walnut & Sixth Street,
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KNIGHT BROS. Consulting Engineers,

—AND—
 COUNSELLORS

IN PATENT CAUSES,

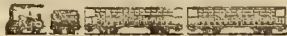
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OPP. POST OFFICE,

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CHICAGO, GREAT WESTERN AND
 NORTH-WESTERN LINE—INDIANA
 POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS. CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:00 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M. Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—6:30 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars. Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

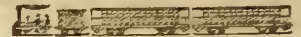
Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.
 W. H. L. NOBLE,
 General Ticket Agent.

C. R. COTTON, Cincinnati

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

Through Distance 260 Miles;

42 Miles Shorter than any other Route

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 7:30 A. M. 7:00 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without rebilling or transshipment.

JOHN BRANT, Jr., Superintendent

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent.

33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON, STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and tax collections.

KNOX & SHAIN, Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums 419 by Franklin Institute.)

T. F. RANDOLPH & BRO. Mathematical Instrument Makers

No. 67 West 6th St. bet Walnut & Vine
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BUSH & LOBDELL, Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

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LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS

Either Single or Double Plate,

With or without Axles.

WHEELS FITTED

To Hammered or Rolled A

In the best Manner, at the Shortest Notice,

Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition
The well-earned reputation of this Road for
SPEED, SECURITY AND COMFORT
Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the recent *Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac At Baltimore with four daily trains for Philadelphia and New York

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting WASHINGTON CITY en route*—being \$1.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the **ONLY ROUTE** by which passengers can procure through tickets and through checks to WASHINGTON CITY

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Baltimore, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

**NEW YORK, BOSTON,
AND ALL EASTERN CITIES,**

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORTSMYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6. CHARLES MINOT, Gen'l Sup't

W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

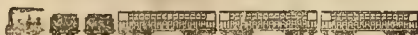
Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material. We are respectfully solicited, with the assurance that laws will be prepared to give of tire satisfaction

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)
IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH to PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
ONE TRAIN RUNS DAILY (430 MILES.)
VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.
ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freight of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "PA. PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
D. A. STEWART, Freight Agent, Pittsburgh.
CLARKE & CO., Transfer Agents, Pittsburgh.
R. C. MELDRUM & CO., Madison, Indiana.
J. E. MOORE, Louisville, Ky.
W. W. AIKMAN & CO., Evansville, Ind.
R. F. SASS, St. Louis, Missouri.
CLARKE & CO., Chicago, Illinois.
W. H. & E. L. LANGLEY, Gallipolis, Ohio.
G. B. NEAL, Parkersburg, Virginia.
HALL & CO., Marietta, Ohio.
H. S. PIERCE & CO., Zanesville, Ohio.
McDOWELL & McCORM, Portsmouth, Ohio.
R. McNEELY, Maysville, Ky.
J. P. JOHNSTON, Ripley, Ohio.
JOHN TODD, Covington, Ky.
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R. C. MELDRUM, General Travelling Agent for the South and West.

LIVE STOCK.

Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other. ENOCH LEWIS, Gen'l S. incendent, Altoona, Pa. L. L. HOUSTON, Gen'l Ticket Agent, Philadelphia. H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement. —; UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	6:30 A. M.	9:20 P. M.
Mail and Express.....	8:30 A. M.	6:20 P. M.
Columbus Accommodation.....	4:00 P. M.	11:05 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton. RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE
Dayton and Sandusky Mail.....	6:30 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:30 A. M.	11:40 P. M.
Cin. & Chicago Air-Line Ex.....	8:00 A. M.	8:50 P. M.
Dayton and Richmond.....	3:15 P. M.	1:30 P. M.
Day., Toledo & Detroit Huntsville.....	5:20 P. M.	10:55 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	8:15 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:55
Eastern Night Express.....	10:00 P. M.	6:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	5:00 A. M.	12:20 P. M.
Indianapolis and Terre Haute.....	5:00 A. M.	12:20 P. M.
Decatur, Springfield & Quincy.....	12:45 A. M.	4:45 P. M.
Chicago Night Express.....	5:00 P. M.	10:40 A. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.
For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE
Louisville and St. Louis Mail.....	6:00 A. M.	10:00 P. M.
Seymour Accommodation.....	2:00 P. M.	1:15 A. M.
Louisville and St. Louis Night Ex.....	7:10 P. M.	7:20 P. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Om nibuses call for passengers as usual.

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Railroad Machinery, Tires, etc.

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, DECEMBER 4, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

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If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—		Depart.	Arrive.
Cincinnati Express.....	6.30 A. M.	9.20 P. M.	
Mail and Express.....	8.30 A. M.	6.20 P. M.	
Columbus Accommodation.....	4.00 P. M.	11.05 A. M.	
Morrow Accommodation.....	6.40 P. M.	8.00 A. M.	
Cincinnati, Hamilton & Dayton—			
Cin. & Chicago Air Line.....	8.00 A. M.	9.50 P. M.	
Dayton & Sandusky.....	6.30 A. M.	6.45 P. M.	
Dayton & Toledo.....	6.35 A. M.	11.40 P. M.	
Richmond & Dayton.....	3.15 P. M.	6.45 P. M.	
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.55 A. M.	
Cin. & Chicago Air Line Exp.....	7.00 P. M.	8.15 A. M.	
Hamilton Accommodation.....	7.00 P. M.	6.55 A. M.	
Eastern Night Express.....	10.00 P. M.	6.40 A. M.	
Sandusky, Dayton & Cincinnati—			
Morning Express.....	6.30 A. M.	6.45 P. M.	
Bellefontaine Accommodation.....	5.20 P. M.	10.55 A. M.	
Marietta & Cincinnati—			
Mail.....	9.00 A. M.	5.35 P. M.	
Accommodation.....	3.30 P. M.	10.15 A. M.	
Ohio & Mississippi—			
Mail.....	5.00 A. M.	10.05 P. M.	
Express.....	5.00 P. M.	5.53 A. M.	
Indianapolis & Cincinnati—			
Mail.....	6.00 A. M.	11.00 A. M.	
Chicago Express.....	7.10 P. M.	9.20 A. M.	
Dayton & Michigan—			
Toledo, Detroit & Chicago Exp.....	6.30 A. M.	11.40 P. M.	
Toledo & Chicago Express.....	5.20 P. M.	10.55 A. M.	
Cincinnati & Chicago Air Line—			
Mail and Express.....	8.00 A. M.	8.50 P. M.	
Night Express.....	7.00 P. M.	8.15 A. M.	
Cincinnati, Wilmington & Zanesville—			
Morning Express.....	10.00 A. M.	6.45 P. M.	
Accommodation.....	6.00 P. M.	8.00 A. M.	
Kentucky Central— (City time.)			
First Train.....	6.30 A. M.	10.44 A. M.	
Second Train.....	2.20 P. M.	6.44 P. M.	

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 17 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

PRESIDENT'S MESSAGE.

The annual message of the President of the United States is always looked to with interest; but at this time, with more than usual curiosity. The topics are certainly of momentous importance. They are no less than war, emancipation, and extraordinary relations with foreign powers, and provisions for immense revenues. In regard to foreign relations, our situation is much better than might have been expected. It was by no means certain, that, by this time, we should not be at war with some of the powers of Europe; or, at any rate, subject to their attempts at some kind of mediation. All this has happily been avoided; and from the present aspect of foreign affairs, we shall probably be free from foreign interference for considerable time to come. There is, however, some difficulty arising from our commercial relations in regard to the blockade. In all cases of blockade, there will be some conflicts with neutral powers; but these cases should be settled by some common tribunal; and this, the President says, has been recommended to the Governments of England, France, Spain and Prussia with some prospect of success.

Emancipation is really the great question of the day, and to this the President has directed most of his attention. The President has always been an emancipationist and colonizationist. Accordingly, he proposes, that if the slave States will pass emancipation acts, in good faith, so as to secure abolition of slavery by 1900 (the close of the century,) he would recommend Congress to provide compensation for emancipated slaves. This is a peace proposition, if accepted; but he also considers it an economical one. That is, Mr. Lincoln thinks, that in such a length of time it would be more economical, than to carry on the war.

The President then suggests amendments to the Constitution, Congress concurring, to be proposed to the legislatures or conventions of the several States, which, if ratified by three fourths of said legislatures, to be valid as parts of said Constitution.

The first article proposes that all States abolishing slavery before January 1st, 1900, shall receive compensation from the United States.

2d. All slaves freed by chances of war, any time before the end of the rebellion, shall be forever free, but all owners who had not been disloyal shall be compensated.

3d. Congress may appropriate money and otherwise provide for colonizing free colored persons, with their consent, at any place without the United States.

The President discusses these questions at some length, and asks, if, then for a common object, slave property is to be sacrificed, is it not just that it be done at a common charge? And if with less money, or money more easily paid, we can preserve the benefits of the

Union by this means than we can by the war alone, is it not economical to do it?

If we suppose that there are four million of slaves, whose cash value is \$400 a piece, this would give \$1,600,000,000, as the total sum to be paid; which, being divided among 32 years, gives but \$50,000,000 per annum. If we suppose the amount doubled, or \$100,000,000 per annum it can undoubtedly be done; and if we added to it enough to colonize one half of them, it can be done by a nation like this, increasing in population and wealth with extraordinary rapidity. But, have we the will? Will the South be willing? More than probably not. In that case the war will go on. The President has proposed the only possible olive branch. If it is not accepted the story will soon be told. Southern society will be broken up and slavery terminate, by the destruction of war. In the meanwhile, the President says his proclamation of the 22d of September, will not be abated and that will be destructive in its effects, unless some measure of relief is afforded by the action of the South itself.

The President concludes this subject:

The subject is presented exclusively in its economical aspect. The plan is proposed as permanent constitutional law. In conclusion, the President says: The dogmas of the quiet past are inadequate to the stormy present. The occasion is piled high with difficulty, and we must rise with the occasion. The fiery trial through which we pass will light us down in honor or dishonor to the latest generation. We say that we are for the Union. The world will not forget that while we say this we do not know how to save the Union. In giving freedom to the slave, we assure freedom to the free—honorable alike in what we give and what we preserve—we shall nobly save or meanly lose the last best hope of the earth. Other means may succeed—this could not fail. The way is plain, peaceful, generous, just. A way, which, if followed, the world will forever applaud, and God must forever bless.

The next most important subject is the currency; and the President does not adopt the new scheme of 4½ per cent bonds, legal tender. He proposes instead, a National Currency, as a substitute for all others. In one word, the plan is to give a *uniform national currency, well secured*, to the whole people, instead of the mixed currencies they now have. This is to be issued by banking associations, authorized by Congress. This plan and its benefits are thus stated:

Is there any other mode in which the necessary provision for the public wants can be made, and the great advantages of a safe and uniform currency secured? I know of none which promises such certain results, and, at the same time, so unobjectionable, as the organization of banking associations under a general act of Congress well guarded in its provisions. To such associations the Government might furnish circulating notes on the

security of United States bonds, deposited in the Treasury. These notes prepared under the supervision of proper officers, being uniform in appearance and security, and convertible always into coin, would at once protect labor against the evils of a vicious currency and facilitate commerce by cheap and safe exchanges. A moderate reservation from the interest on the bonds would compensate the United States for the preparation and distribution of the notes and a general supervision of the system, and would lighten the burden of that part of the public debt employed as security. The public credit, moreover, would be greatly improved, and the negotiation of new loans greatly facilitated, by the steady, market demand for Government bonds which the adoption of the proposed system would create. It is an additional recommendation of the measure, of considerable weight, in my judgment, that it would reconcile, as far as possible, all existing interests, by the opportunity offered to existing institutions to reorganize under the act, substituting only the secured, uniform, national circulation for the local and various circulation now issued.

Such a currency would unquestionably drive out bank notes sooner or later, and would have two great benefits. 1. Of furnishing the people a *uniform national currency*, which, for more than half a century, has been a commercial desideratum. 2. It would enable the Government to put out two or three hundred millions additional notes, without further depreciating their value. It would also create, as the President says, a new demand for the Government bonds. On this measure, in connection with other plans, we propose hereafter to comment.

In regard to improvements, the President recommends the speedy completion of the Pacific Railroad, and the Atlantic Pacific Telegraph to the Russian dominions.

On the whole, the President's message is an able and an interesting one. The session of Congress will be short, but we trust, a useful one.

BALTIMORE AND OHIO RAILROAD.

The withdrawal of the rebel troops from the line of this road, has afforded the company an opportunity of ascertaining the amount of damage done to this important thoroughfare. A reconnaissance, made by one of the supervisors, on foot, over the whole of the damaged portion, shows that the destruction commences three or four miles west of Harper's Ferry, and extends to a point about ten or twelve miles west of Martinsburg, where the road again comes in sight of the Maryland shore. At Martinsburg, which had always been a great station for the exchange of engines, and where large repair-shops and other buildings were located, very great injury has been done. These buildings included agents' and master-mechanic's dwellings, a

passenger dining hotel, large ticket office and storehouse, woodhouses, coal dumps, water stations, and other improvements incidental to the working of a large road. Not one of these edifices was spared. Several miles of side tracks, with numerous intersecting switches, were also entirely removed and the material burned—the wooden parts entirely—and the iron so bent or otherwise distorted as to be useless. Along the road many of the iron bars of the track, after being heated, were twisted in all sorts of fantastic shapes by wrapping around the trunks of trees, or being hung over the fences while under a red heat. Throughout the entire distance where this ruin prevails the telegraph wires and poles have also been destroyed. In short, the railroad and its telegraph, with all its water stations and other appliances and conveniences, will have to be entirely rebuilt, except so far as the grading is concerned, which is said to be disturbed only where bridges have been blown up or burnt.

It is stated that the officers of the company are prepared to relay this portion of the road, just as soon as the government places such a force between their line and the rebel army, as to give a reasonable assurance of future protection. They are prepared to do this enormous amount of work in from twenty to thirty days.

This road has been far the greatest sufferer by the war. The spirit that seemed to actuate the rebels in their occupancy of it, was distinguished for its malignity and wantonness. It was not a mere desire to cripple the road for military purposes, but a fiendish effort to forever destroy a great work of internal improvement. Fortunately the labor of destruction proved too great for those who had it in charge, and the road bed is almost entirely uninjured. There is also said to be an average of about 70 rails to the mile fit to be relaid. Had the rebels transported this iron to the south for the purpose of repairing some of the wear of their own roads, we could have partially forgiven the destruction they have worked. But such has never been the character of Vandalism; and the modern Vandals differ little from those of former days. The wantonness of their effort is strikingly shown in the fact that thirty days at the farthest will put the road again in condition to be used.

The importance of re-opening this road is readily seen, when it is remembered that it is in reality one of only three great outlets from the West to the Atlantic. For the Erie and the New York Central, being fed by the Lake Shore Line, form practically but one route, just as the Pennsylvania Railroad forms another single route, although fed by the Pittsburgh, Ft. Wayne and Chicago and the Crestline and Steubenville Lines. We trust it will not be long before the Baltimore and Ohio Railroad will be re-opened permanently to the business of the country.

NORTHERN RAILROAD OF ILLINOIS.

We are indebted to the officers of this company for a copy of their first annual report for the year ending Sept. 30, 1862.

The Northern Illinois Railroad is a line of 38½ miles, extending from Freeport to Savanna on the Mississippi River. The line connects with the Racine and Mississippi Railroad at Freeport, and is, in fact, a direct continuation of that Railroad, and the two roads are operated under one management. The length of the two lines, extending from Lake Michigan, at Racine, to the Mississippi River, at Savanna, is 142 miles. By connection with the Milwaukee and Chicago Railroad at Racine Junction, two miles from Racine, a direct line to Milwaukee is formed, 165 miles in length, between Savanna and Milwaukee; the shortest line from Milwaukee to the Mississippi by 27 miles. By connection with the Chicago and North Western Railroad, at Clinton Junction, a direct line to Chicago is formed, 161 miles in length, between Savanna and Chicago. By connection with the Illinois Central Railroad, at Freeport, a direct line is formed to Dubuque, from Chicago, Racine, and Milwaukee.

On examination of the map, it will be seen how important are the connections formed by the line from Racine to Savanna. It is the only line which makes direct connection with the three lake ports—Chicago, Racine, and Milwaukee. From these ports, all the produce of Illinois, Wisconsin, Iowa, and Minnesota, is shipped, and by the Racine and Mississippi and Northern Illinois Railroads alone can shippers from Dubuque, Savanna and other points on the river, send to three ports. Racine is 60 miles north of Chicago, has an excellent harbor, easy of access, and the facilities for transshipment, in point of cheapness and expedition, are superior to those of Chicago. The Railroad depot at Racine is on the dock, and goods are taken from vessels on to the cars without the expense of cartage; the tracks also run to the warehouses of forwarders and to elevators for shipping grain. Goods brought by the propellers from the lower lakes are loaded immediately on the cars and proceed to their destination without delay, avoiding the additional 60 miles of lake navigation to Chicago, and all the delays and expenses of transshipment at that port.

The line from Racine to Savanna traverses in its whole length a country unsurpassed in richness of soil and farming advantages. The country has been long settled, and is for the most part well improved; there are numerous towns on the line where the business of the country is transacted, and manufactures have been established to some extent. Racine has large establishments for the manufacture of agricultural implements, and the businesses of tanning and milling have been extensively carried on there for some time,

and it is also a large lumber market. There are numerous water powers on the line, where flour mills are in operation; also paper mills at Beloit and Rockton, on Rock River. At Savanna, there are saw mills for lumber, and flour mills. There are colleges of eminence at Racine and Beloit, and public schools of high character at Freeport, Mount Carroll and Savanna.

The construction of the Northern Illinois Railroad was commenced in May, 1861. On the 1st October, the first 20 miles of the line was opened to a point named Lanark, which was then in the middle of an unbroken prairie, with the exception of a corn field on which part of the depot was located. Lanark is now a town with numerous stores and warehouses, and is the centre of an extensive business. The shipments from this station for the first year amounted to 23,124,464 lbs. weight, of which there were 3,237,500 lbs. of live stock, 12,772,180 lbs of wheat, (212,853 bushels,) 7,353,480 lbs. of other grains, (122,588 bushels,) and the balance hides, butter, pork, wool, rags and sundries. The shipments received for the year amounted to 26,624,930 lbs. weight, consisting of merchandise, lumber, coal, iron, salt, lime, agricultural implements and sundries.

Two other stations were established, named Florence and Shannon, from which considerable business has been derived.

In April of the present year, ground was broken for the extension of the line to the towns of Mount Carroll, and Savanna the terminus on the Mississippi River. The Spring was late and unfavorable, but by energy and skill the work was completed early in the month of August. The credit of the work, which will be afterwards referred to, is due to the Superintendent of construction, Mr. R. W. Smith.

The completion of the line to the Mississippi was celebrated on the 14th of August, by an excursion party of 600 persons in a train made up of three parts, one from Racine, one from Milwaukee, and one from Chicago, united into one train at their respective junctions with the main line. At Savanna, and Sabula on the Iowa side of the river, connected with Savanna by a steam ferry, the party was bounteously entertained by the citizens. The excursion party, with the exception of those who desired to return to their homes the same day, was extended by the courtesy of the Northern Packet Line Company, up the river to Dubuque, returning next morning and arriving at their several points of departure the same day. The completion of the line was, to the people of Mount Carroll, Savanna and Sabula, a subject of more than ordinary gratification. The people of important sections of the country generally entertain the conviction that railroad facilities will, in due course, be extended to them, but, on this line, the people had been disappointed three times by the failure of projected lines which

were commenced and abandoned, and in one instance after a very large expenditure of capital, by which the people suffered severely from having contributed towards the work. Donations to the amount of \$25,000 were subscribed towards building the Northern Illinois, and a large proportion of the right of way was also donated.

By the superintendent's report of construction, it will be seen that the work accomplished was very heavy as compared with the general character of work upon western roads. The work has been well and substantially done, and in that respect is superior to the generality of new roads in the West. Substantial masonry has been put in all important culverts, the grades are moderate, the iron is of sufficient weight for a first class road, and is laid upon more than the usual number of ties of excellent quality, a large amount of ballasting has been done, partly with broken stone and partly with gravel, and the road bed is in every respect in good running order, well ditched, and already fenced in over two-thirds of the way. Good and appropriate passenger and freight houses have been erected at every station; the supply of water is provided for by well built tanks at suitable distances, one of which is supplied by a caloric engine, and another by steam power, and at Savanna an engine house to hold six engines, with turn-table attached, also a repair shop with steam power, and extensive sidings are completed; a line of telegraph was built and in operation shortly after the opening of the road. Cheapness of construction has not been sought at the expense of efficiency for the business in prospect. It is gratifying at the same time to be able to report that the entire cost of construction, including telegraph and collateral expenses, is within \$10,000 per mile, a rate which, it is believed, no road in the United States has ever been built for before, making due allowance for the character of the work accomplished. The low price of materials and labor, during the past two years in which the work has been done, was most favorable to cheap construction, and it may well be doubted if so good an opportunity for building a railroad will occur again in the West for many years to come. The times were not altogether without disadvantages, but these were more than compensated for by low prices. The disturbed state of western currency caused much inconvenience, as the laborers could only be worked to advantage by paying them in gold until the issue of treasury notes, which were available in the latter part of the work. The line commenced business regularly between the river and the lake on the 1st of September.

CAPITAL STOCK AND BONDS.

The capital stock of the Northern Illinois Railroad Company, subscribed and paid upon amounts to \$257,100, on which there has been paid \$65,075, as stated in account appended.

First mortgage bonds, bearing 8 per cent. interest, have been made on the whole road to the amount of \$500,000, on which advances have been obtained for the requirements of the work at 10 per cent. interest, with the option of purchasing the bonds at 80 per cent. The advances, with interest, amounted on 30th September to \$336,678.18, as shown in account "loans." The interest is charged to construction to 30th September, 1861, for the amount expended on the 20 miles of road then opened, and to the 1st September, 1862, for the amount expended on the balance of the road. The interest upon the cost of the first 20 miles has been charged to "revenue interest and dividend account," for the year ending 30th September, 1862, and upon the balance of the road for the month of September.

OPERATING.

By agreement with the trustees in possession, now operating the Racine and Mississippi Railroad, the Northern Illinois Company has to maintain its road in good running order, and in return for the entire use of the line it receives 50 per cent. of its gross earnings, estimated by allowing its mileage proportion of the full receipts of the whole line from Savanna to Racine. The arrangement is a very favorable one to the Racine and Mississippi road, as the largest amount of business is obtained from the Northern Illinois Railroad. By the completion of the Northern Illinois Railroad, the Racine & Mississippi road was raised from a third class to a second class mail route, and the business in every department has been largely increased.

The balance of "operating account," after charging track repairs and other expenses, amounts to (see account appended).....	\$16,273 72
(Being for 20 miles in operation 11 months, and 38½ miles for 1 month of the year.)	
The interest on advances for the year amounts to.....	12,648 86
Leaving balance at credit of "revenue interest dividend,".....	\$3,624 86

FUTURE EARNINGS.

The road may, with much confidence, be estimated as capable of earning 10 per cent. on its cost. As a work it can not be estimated as worth less than 50 per cent. in advance of its cost, according to present prices of labor and material. The entire cost is within \$10,000 per mile, and it is very doubtful if any responsible contractor could now be found who would engage to perform the same amount of work for \$15,000 per mile. The location of the road might be taken into account as adding more to the value, but that is best arrived at by an estimate of earnings. The road is in a position in which it can depend upon a working arrangement as favorable, and it ought to be better than its present, looking to the amount of business emanating from the road. It would be a more equitable working arrangement if the Racine road were to pay the expenses of maintenance of track, but at present that is matter of opinion, and the interests in the two roads are so united, this question may prudently be reserved for

consideration when further experience of the business will afford data for a more exact adjustment of interests.

With respect to traffic, there could not well be a more unfavorable year than the present, on account of a very poor wheat crop.

The net receipts for the year commencing 1st October, may be estimated at.....	\$60,000 09
Road repairs and other expenses.....	12,000 00
	\$48,000 09
Interest on \$440,000 bonds.....	35,200 00
	\$12,800 00
Surplus of stock.....	6,507 50
10 per cent. on \$65,075 stock.....	6,507 50
Surplus over interest on bonds and 10 per cent. on stock.....	6,292 50

The bonds are put down at \$440,000, as the whole advances with interest amount to \$336,678.18, and it is intended that the \$440,000 bonds shall settle these advances by sale at 80 per cent., yielding \$352,000 which affords a margin of \$15,321.82, for contingencies and additional expenses in ballasting, fencing, &c., and track accommodations at Savanna. There will remain \$60,000 of bonds on hand. With a favorable season and good crops, and the development of the business of the line, the receipts may very soon exceed their present amount by 50 to 100 per cent.

Such calculations on railroad investments are unknown of late years, but in this case, with unexampled cheapness of construction, a secured revenue, and limited expenses, there is little margin for error in estimate.

The balance sheet of the company is as follows:

BALANCE.	DR.
Construction and general expenses.....	\$396,257 50
Supplies.....	7,976 26
Bills receivable.....	16,599 11
Real estate.....	9,856 50
Open accounts receivable.....	3,481 86
Cash.....	146 73
	\$434,678 05
	CR.
Capital stock.....	\$65,075 00
Loans.....	336,678 18
Revenue interest and dividend.....	3,624 86
Open accounts payable.....	26,385 01
Bills payable.....	2,915 00
	\$434,678 05

The operating account of the road is as follows:

OPERATING ACCOUNT.	DR.
To repairs of track.....	\$7,214 24
To clearing track from ice and snow.....	543 26
To revenue, interest and dividend.....	16,273 72
	\$24,031 22
	CR.
By Revenue—Net receipts for the year ending the 30th Sept. per working agreement with the trustees of the R. & M. R. R. for 2 miles, (Freeport to Lanark.) and the whole line (Freeport to Savanna,) for the month of Sept., 36 4-10 miles.....	\$24,031 22
	\$24,031 22

NOTE.—The road repairs are large on account of the new condition of the road and a portion of these might have been fairly charged to construction. The severe snow storms of last winter also added largely to the cost.

The officers of the company are:

Directors, Elijah Northey, Cherry Grove, Ill.; Enoch Chamberlain, Savanna, Ill.; L. H. Bowen, Savanna, Ill.; H. A. Mills, Mount Carroll, Ill.; Duncan Mackay, Mount Carroll,

Ill.; Thomas Long, Freeport, Ill.; Chancellor Martin, Freeport, Ill.; Edward P. Barton, Freeport, Ill.; Frank Smith, Freeport, Ill.; William Shannon, Freeport, Ill.; Marshall M. Strong, Racine, Wis.; R. A. Knapp, Racine, Wis.; G. A. Thompson, Racine, Wis.; G. A. Thompson, *President*; R. W. Smith, *Superintendent of Construction*; Hyatt Sinclair, *Secretary and Treasurer*. Road operated in connection with the Racine and Mississippi Railroad.

RAILROAD LOCOMOTIVES AND STEAM CARRIAGES.

In a recent editorial the Railway Times indulged in some remarks upon the vast superiority of railroads as a means of locomotion, and intimated its opinion of the impossibility of adapting steam for use on common roads. The remarks in the Times have drawn out the following communication from Mr. J. K. Fisher, of New York, who has been long identified with steam carriages for common roads, and has built probably the most practical machine that was ever constructed for this purpose. Mr. Fisher says:

"I wish to controvert parts of your article under this title, in your number of Nov. 15th.

First, you ascribe to George Stephenson the union of the locomotive and the railway. Hebert's Encyclopædia represents that in 1802 Trevithick and Kiran patented a steam carriage, which they built in 1804, and ran in London. Soon after they built a locomotive, which ran on a tram road, drawing ten tons of iron. This engine had but one cylinder, and smooth wheels. Blenkinsop in 1811, and Chapman in 1812, built locomotives with two cylinders and coupled wheels. In 1814 George Stephenson built for the Killingsworth Colliery an engine on Blenkinsop's plan, with cogged drivers, to work on a toothed rail. It was soon found that the adhesion of smooth wheels was sufficient. Trevithick had found it so ten years before. In 1815, in connection with Dodds, and in 1816, in connection with Losh, Stephenson took out patents, and built engines; but on inspection of the engravings and descriptions of them it appears to me that he did not improve the invention, although, as engineer of the company, and as constructor, he may have done much to help it into use. So far as the locomotive, and its union with the railway, can be deemed the invention of one man, it seems to me that Hebert is right in giving the credit of it to Trevithick. And Trevithick, from 1802 to 1831, was a firm believer in the practicability and economy of steam carriages on common roads, as may be seen by his evidence before a select committee of the Commons, reprinted by order of the House of Representatives in 1832.

Second, I agree with you that steam on our roads cannot take the place of the railway. But in what sense do we say this? When a

railway has traffic enough to pay, the common road is commercially its inferior, even if steam be used; but when the traffic is insufficient, then we have to consider, not the road, but the motor, and to choose that which will cost least, reckoning time, first cost, repairs of road, and all other expenses. Every competent advocate of steam carriages deprecates the injudicious claim that common roads can compete with railways, in the general sense of this expression; and the true claim is, that there is room for steam carriages where railways will not pay, or will not allow freedom of turnouts, or the desired accommodation of private carriages.

Third, as to speed, I have run on soft gravel roads in New Jersey, much inferior to the gravel roads near Boston, at 15 miles per hour, timed by myself, and two gentlemen reported to me that they timed a mile at the rate of 22½ miles per hour, with 11 men on the carriage, and the mile the most level on the road, and not sensibly out of level, as they judged by the river alongside of it.

Fourth, as to cost. You seem to credit the common presumption that such speed would be a costly luxury, and would knock the engine to pieces. Whenever I have an opportunity I can show you that this difficulty, which in the early period of the invention did exist, has been overcome. My carriage runs with less jolting than any other carriage I ever rode upon. The springs are more flexible than omnibus springs; and yet in consequence of my improved connections, the carriage is not rocked by the engine, and runs as steadily as if it were drawn. Of course, high speed, whether on rails or highways, will be hard upon wheels, axles, and all unsuspended parts; even with horses we find this, and expect to pay for it; but the damage is less than is supposed, and good suspension mitigates it. A locomotive on rails at ten miles per hour jolts worse than my carriage at the same speed on cobble pavements, and worse than it jolts on gravel roads at twenty miles per hour. In fact, the suspended parts suffer less than they do in locomotives.

Comparing the cost with that of horses, at any reasonable speed, you will see that the advantage is with steam. It is unfair to take the slow pace of our own stage coaches, in which the time of passengers is wasted to save excessive cost of horse power, as a criterion of cost, unless you charge the value of time. But in English post coaches, that used to average 7½ miles per hour, stops included, the cost was 36 cents per mile for the power, on their excellent turnpikes. The coaches loaded weighed two tons, and the traction was 65 lbs. per ton. Now a locomotive, with an average traction of 3000 lbs. works at 15 to 20 cents per mile, according to the cost of fuel, as the monthly reports show. To this we must add interest, and a general charge, which I estimate at about 4 cents. And to the cost of horses in England we must add the wages of

the driver, which are paid by presents from passengers. With these allowances it will be seen that a locomotive with 15 x 22 cylinders runs at less than two-thirds the cost of a four horse team, and draws with 23 times the force, and at least 12 times the force utilized on the train. On a steam carriage the load is so blended that we should judge by the gross tractive force. Now my cylinders are 7 x 14, with 5 feet wheels, showing about 1-7th the power of an average locomotive. Yet this carriage will carry the load of a stage at double its speed, on a good gravel road; and on a first rate English road it could easily keep a speed thrice that of horses,—that was done twenty years ago.

But in the estimate of cost we should include repairs of road. MacNiel estimated that 3-4ths of the damage to roads was by the feet of horses, and 1-4th by the wheels. Allowing the steamers to weigh twice as much as the horse carriage, it will injure the road half as much. But in proportion as we avoid horses' feet, and use broad tyred wheels, we smooth the roads, lessen the traction, and in the same ratio lessen the damage to the road. It has been found, both on railways and highways, that the cost of motive power bore a close relation to the cost of repairs, both of roads and vehicles.

Fifth, as to offensiveness. You facetiously ask what the parson would say if sixty steam carriages, puffing, snorting and whistling, were drawn up in front of his church. I suppose he would say they need not whistle nor snore, nor puff audibly. But what would he say if in the most solemn part of his service, several horses should laugh, snort, &c. My friend Dudgeon told the Mayor of New York that a steam carriage was cleanly and decent, and a horse was nasty and indecent, and that all the dirt in the streets was directly or indirectly due to horses, and would disappear with horses as soon as asses would allow men of liberality and genius to develop and establish steam locomotives in cities,

Sixth. You justly say that an iron floor would be the best road for steam carriages. But you add, unjustly I think, that the expense would prevent its adoption. It is claimed, both in England and here, that iron paving is cheaper than stone, where there is much traffic; and it was the opinion of MacNiel, thirty years ago, that on the highways twenty miles around London a good pavement would be cheaper than a Macadam road. In opposition to such opinions, and not a few facts, we should not express doubts in the form of assertions.

Seventh. Smooth and hard roads, which are deemed too slippery for horses, are the most desirable for wheels; but steamers can do without them: and can underwork horses on their own roads and gradually supersede them. This is the opinion of many of the most celebrated engineers in Europe and this country. And when horses are in the minor-

ity, and roads are made for wheels, steamers can attain great speed at little cost; and can diverge from the superior highways, and go over the byways to private residences. They will save transhipment; they will allow privacy and luxury; and, for suburban travel, will be more convenient than the mixed system of rails and common roads. But on long lines the railway is not likely to be much opposed by the common roads.

Eighth. I do not see with you that were we called on to give up the locomotive or the rails, we should do well to give up the locomotive. I am confident, and believe I can show by my carriage, that we can carry passengers on pavements and good gravel roads cheaper than horses can draw them on rails, even at 7 to 9 miles per hour, and at higher speed the advantage of steam increases. The operation of the horse railways, to which you refer in support of the view you take, is not a criterion; it does light work cheaper than heavy trains can do it; but if steam machinery be adapted to light work, the comparison will be widely different. Yours, respectfully,
30 Broadway, New York. J. K. FISHER.

We are pleased to be able to lay before our readers this elaborate statement from one so competent to give the facts in the case. While we can see no comparison or rivalry between railroads and common roads, we have always been of the opinion that improved forms of steam carriages would certainly be used on common roads, and would hereafter do much of the business now done by horses. We believe such a carriage would work a vast improvement, and be of great advantage socially as well as in a business point of view.

CHICAGO AND NORTH WESTERN RAILROAD.

This road is now completed and running to Green Bay. The company have just celebrated the opening of the last link by a grand excursion from Chicago over the line. The excursion party went as far as Oshkosh on the regular day express train, that much of the road having been run for some time. From this point they proceeded by special train, and were hailed with demonstrations of pleasure at the various points on the road. On the return of the excursion the following resolutions were adopted by the party:

Resolved, That the thanks of the assembled guests of the Northwestern Railway Company are due to the officers and the Board of Directors of that organization for their unremitting attention and kindness during the excursion trip given in honor of the opening of the road to Green Bay.

Resolved, That, while we acknowledge the generosity of all, we are especially desirous of giving our testimony in behalf of the gentlemanly Vice President, Mr. P. H. Smith, the efficient Superintendent, Mr. George L. Dunlap, the ever-obliging General Ticket Agent, Mr. De Witt Robinson, and the genial and assiduous Mr. C. H. Tappan, Freight Agent. To these gentlemen they owe all that the most untiring exertions could effect in rendering

their journey agreeable and pleasant. To their efforts they are indebted for the enjoyment of one of the most successful and delightful railroad excursions within the experience of any of their present guests.

Resolved, That our gratitude is due to the citizens of the thriving and beautiful cities of Fond du Lac and Oshkosh for the attention paid to our wants, and the prompt manner in which accommodations were provided for our benefit at each of these places, on the occasion of our stay over night. We hope and trust the prosperity of those cities may equal the extent of their hospitality.

Resolved, That to the citizens of the city of Green Bay are hereby tendered our thanks for the princely manner in which the excursion party was entertained. In the warmth of their reception, the promptitude of their arrangements, and the splendor of their grand banquet, they were unequalled. Their warm-hearted hospitality excelled our expectations, and caused us to feel, that the occasion cannot soon be forgotten.

Resolved, That we congratulate not only the Northwestern Railway upon this auspicious event, but the whole northwestern country, whose abounding fruits find here a source of communication with the channels of commerce. The fine forests, the fisheries, the agricultural products, and, in time, the gigantic mineral wealth of Lake Superior, are made freely accessible, and thrown open to the world of enterprise. May the energy and tact which accomplished these grand results meet with its appropriate reward.

Resolved, That to all connected with this important event, we feel indebted for pleasure and entertainment. To the hotel landlords, to the conductors and other train officials, and to the splendid music of the Light Guard Band under the leadership of Mr. Barnard. To these, and all others who contributed to our unlimited enjoyment, we return hearty thanks.

The Chicago and Northwestern Railroad commences at Chicago and runs northwest to Janesville, Wisconsin, from thence in a northern and northeastern direction through Watertown, Fond du Lac, Oshkosh and Appleton to Green Bay. Its whole length is 339 miles. The link just opened is from Appleton to Green Bay, 26 miles. The route of the road runs mainly through a rich wheat growing country, well populated, and affording abundance of local business. It runs for some distance in the valley of Rock River. Important water privileges exist at Janesville, Fort Atkinson, Jefferson and Watertown. In its northern extension from Oshkosh it passes through a fine lumber region.

The earnings of the road have more than equalled the expectations of the company. The receipts of the seven months ending Nov. 1 were:

Passengers.....	\$216,755 57
Freights.....	402,496 28
Express.....	6,169 94
Mail.....	11,870 81
Miscellaneous.....	3,181 30

Total.....	\$640,473 90
Running expenses.....	305,612 43

Net earnings in seven months.....\$334,861 42

Estimating the earnings of the balance of the year at the same rate we shall have:

Net earnings one year.....	\$575,000
The annual interest, including the first mortgage, the Assented bonds, and all other debts excepting the second mortgage, is about.....	430,000

\$145,000

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	48													
Baltimore and Ohio.....	Md.	64	380	13,111,800	10,781,833	566,071	3,922,203	2,365,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do										"	2,500,000	6	95	1885	
do do										"	700,000	6	84	1880	
do do										"	1,128,500	6	90	1875	
do Washington Branch.....	Md.			1,650,000						"	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind.	118		1,859,813	1,256,750	139,125	314,000	8,795	Dec. 1860.	1st Mortgage.....	791,000	7	55	1866	
do do										2d "	100,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	60	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	138	96	3,798,400	8,820,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	377,000	6	100	1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7	62	1861	
do do										1st "	800,000	7	80	1864	
do do										2d "	800,000	7	64	1865	
do do										3d "	950,000	7		1865	
do do										4th " S. F.	1,365,000	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d "	600,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,509	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d "	1,535,000	7			
do do										3d "	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d "	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	104		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref. 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	101	Feb. & Aug. 1	
do do										2d "	3,600,000	7	77	Feb. & Aug. 1	
do do										2d "	2,800,000	6	31	May 1.	
Chicago and Rock Island.....	Ills.	78	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,600,000	7	105	1870	
Chicago, Burlington and Quincy.....	"	88	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	110	1873	
do do										" 2d " S. F.	813,000	8	108	1890	
do do										1st Mor. Chi. & Aur.	390,000	7		1867	
do do										2d "	303,000	7		1869	
do do										1st " Cent. Mil. Tract	392,000	7		1864	
do do										2d " " "	245,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	105	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	950,000	7	100	1880	
Cincinnati, Wilmington & Zanesville..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
do do										Income.....	305,509				
Cleveland and Mahoning.....	Ohio.	68		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d "	492,000	7			
do do										3d "	341,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	40	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7	96	1873	
do do										3d 2d Ex.	1,165,000	7	81	1865	
do do										4th 3d Ex.	1,154,000	7	75		
Cleveland and Toledo.....	Ohio.	66	148	3,343,800	3,850,670	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jan. 1st Div.	359,000	7	103	1867	
do do										1st " " 2d Div.	293,000	7		1872	
do do										2d "	265,000	7		1862	
do do										1st " Tol. Nor. & Cleve	521,000	7		1863	
do do										2d "	293,300	7		1864	
do do										Junction Income..	44,500	7		1864	
do do										C. & T. Income..	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	136	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	135	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	106	1861	
do do										2d "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	115	54	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700	7	100	1860 to 1866	
Columbus, Piqua and Indiana.....	"		103	In hands of Receiver.	2,512,000										
Dayton and Michigan.....	"		142	2,176,666		292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
do do										2d "	2,212,000	8			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	50		
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000	7	90	1875	
do do										2d "	1,000,900	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		956,051	1,219,100	249,868	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.											
do do										1st Mortgage.....	400,000				
Galena and Chicago Union.....	Ills.	80	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	2d "	180,000				
do do										1st Mortgage.....	1,993,000		104	1862 & 1863	
do do										2d "	1,520,000		100	May 1, 1875	
Great Western.....	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report		63,141	13,573							
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000				Land Mortgage...	5,000,000				
Hannibal and St. Joseph.....	Mo.	206		1,041,086	10,554,000	220,336	996,907	512,933	Sept. 1, 1860.	Mortgage Conv....	1,354,000		50		
do do										1st Mortgage.....	927,000	6	30	1873	
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	4,000,000	7	115	1869 & 1870	
Hudson River.....	N. Y.	72	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	2d S. F.	2,000,000	7	103	1870	
do do										3d "	1,840,000	7	101	1875	
Illinois Central.....	Ills.	76	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000	7	107	1868	
do do										Construction.....	12,885,000	7	100	1875	
do do										"	4,115,000	6	97	1875	
do do										Debentures.....	42,740	7	96		
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000	7			
do do										2d "	578,000	10			
do do										Income.....	38,700	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000	7		1866	
do do										2d "	400,000	7	90		
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,932	36,773	Dec. 31, 1860.	Real Estate Mort..	200,000	7	90		
do do										1st Mortgage.....	649,984	7			
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d "	314,000				
Iron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock	Length of Ry.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount	Rate of Int.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.	86 1/2		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st ".....	249,000	7	75	1861
do										2d ".....	392,000	7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,632	425,408	227,534		1st Mortgage.....	160,000	6		
do										1st ".....	260,000	7		
do										2d " Conv.....	1,000,000	7		
do										3d ".....	600,000	7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.....	903,000		89	
do										2d " E. D.....	1,000,000			
do										1st Land Grant W D.....	4,000,000		21	
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report							
Lexington and Frankfort.....	Ky.	29		514,433	130,000		105,944	43,267	June 30, 1861	1st Mortgage.....	130,000	6		
Little Miami.....	Ohio.	65					1,330,050	529,981	Jan. 1, 1862	1st Mortgage.....	1,300,000	6		1863
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		245,910	93,679	June 30, 1861	City Loan.....	174,000	6		
do										1st Mortgage.....	212,000			
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st Mortgage.....	2,000,000	7		
do										1st " Lebanon Br.....	400,000			
do										1st " Memphis Br.....	500,000			
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861
Marietta and Cincinnati.....	Ohio.	203		8,561,213	190,403	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv.....	2,500,000	7		1863
do										2d ".....	2,000,000	7		
do										3d ".....	1,500,000	7		
do										Sterling Income.....	333,000	4		
Michigan Central.....	Mich.	88 1/2	284	6,057,784	7,968,489	123,000	2,126,699	910,169	May 31, 1861	Domestic.....	928,617			
do										1st Mortg' Sterling.....	467,483	6	98 1/2	1872
do										1st " Conv.....	500,000	8	84	1869
do										1st " unconv.....	250,000	8	96	1860
do										1st " Dollar Conv.....	2,598,000	8	106	1869
do										1st " S. F. Conv.....	4,153,000	8	112 1/2	1862
Michigan South'n & North'n Indiana	Mich. & Ind.	37 1/2	246	9,018,200	9,714,704	437,886	2,075,450	1,030,829	Mar. 31, 1861.	Mort. Mich. So.....	991,000		108	1860
do										" Nor. Ind.....	985,000		103	1861
do										" Goshen Line.....	1,168,000		100	1863
do										S. F. Toledo.....	2,850,000		103 1/2	1865
do										2d Mortgage.....	2,465,000		93 1/2	1877
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d ".....	200,000	8		
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8		
do										2d ".....	600,000	8		
Milwaukee and Prairie du Chien.....	Wis.	34	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	104	1891
Milwaukee and Western.....	Wis.	71		No report										
Mississippi and Missouri.....	Iowa,	55		No report										
do										1st Mortgage Conv.....	1,000,000	7	96	
do										2d " S. F.....	400,000	8		
do										Oskaloosa Div.....	1,425,000	7		
New Jersey.....	N. J.	34		4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Land Grant.....	7,000,000		100	
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	Mortgage.....	711,000		109	
New York and Erie Pref.....	N. Y.	90 1/2		Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860	1st Mortgage.....	3,000,000		106	
do		60								2d ".....	4,000,000		110	
do										3d ".....	6,000,000		107	
do										4th ".....	4,900,000		100	
do										5th ".....	1,792,500		100	
New York and Harlem Pref.....	Conn.	50	138	5,717,190	6,055,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	109 1/2	1873
do										2d ".....	1,000,000	7	103	1864
New York and New Haven.....	Conn.	21		3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	7	94	Dec. 1, 1866
do														
New York Central.....	N. Y.	101 1/2	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.....	975,000	6	106	Oct. 1, 1875
do										Mortgage.....	3,000,000	7	109	May 1, 1883
Northern Central.....	Md.	138		2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,000,000	6		June 15, 1864
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000			1865
Ohio and Mississippi, Eastern Div....	Ohio & Ind.	192		Leased.	9,880,000	2,330,030	893,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500			
do										3d ".....	316,995			
do										Construction.....	4,637,920			
do										Income.....	3,591,185			
Ohio and Mississippi, Western Div....	Ills.	148		3,292,403			No report							
Pacific.....	Mo.			3,199,662	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000			
do										" S. W.....	2,800,000	6		
Pennsylvania.....	Pa.	339		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	Construction.....	4,500,000	6	104 1/2	1888
do										1st Mortgage Conv.....	4,900,000	6	98 1/2	1875
do										2d ".....	2,319,000	6		1875
do										2d " Sterling.....	1,957,440	5	89	
do										State Works.....	7,200,000			
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report							
Philadelphia, Wil. and Baltimore.....	Del.	98		5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6	90 1/2	1894
do										Improvement.....	119,000	7	105 1/2	1863
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	48	467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	1st Mort. O. & P.....	1,000,000	7	105 1/2	1865
do										2d ".....	750,000	7	90	1866
do										1st " O. & I.....	1,000,000	7		1872
do										2d ".....	380,000	7		1873
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.....	500,000			
Racine and Mississippi.....	Wis.	104		2,765,720	1,417,900	1,055,328	220,850	68,438	May 10, 1861.					
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856
do										".....	997,000	7		1866
do										".....	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,934	31,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886
Seato and Hocking Valley.....	Ohio.	56		400,000	500,000	100,000	110,200	53,100						
Springfield, Mt. Vernon & Pittsburgh.	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000			
do										2d ".....	450,000			
Steuensville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d ".....	900,000	7		1865
Terre Haute, Alton and St. Louis....	Ills.	208		No report						1st Mortgage Conv.....	1,000,000	7	98	1862
do										2d " Conv.....	2,000,000	7	78	1868 & 1870
do										1st " Bel. & Ill.....	517,000	7		1873
Terre Haute and Richmond.....	Ind.	105	73	1,321,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	106	1866
Toledo, Wabash and Western.....	Ohio & Ind.	243		2,123,500	5,990,940	52,389	233,545			1st Mortgage.....	3,400,000	7	98 1/2	Aug. 1, 1865
do		78								2d ".....	2,500,000	7	80 1/2	Nov. 1, 1876
do										Mort. Coupons.....	94,049	7		1860 to 1865

Leaving \$145,000 for the interest on the second mortgage bonds, the issue of which is \$2,000,000. The road, in fact, has this year earned the interest on the entire debt, although a portion of the road upon which interest has been paid has not yet earned anything.

STATEMENT OF INCOME ACCOUNT, NOV. 1, 1862.

Balance to credit of income account, as per report, to April 1, 1862.....	\$562,615 35
By gross earnings from April 1, 1862, to Nov. 1, 1862,	
From passengers.....	\$216,755 57
From freight.....	402,496 29
From express.....	61,9 94
From mail.....	11,470 81
From miscellaneous.....	1,779 85
From car mileage.....	1,401 45-610,473 90
Less for operating expenses from April 1, 1862, to Nov. 1, 1862, as per statement attached.....	\$305,612 45
Less for interest on Flagg Trust Bonds, due July 1, 1862.....	9,800 00
Less for interest on preferred First Mortgage Bonds, due Aug. 1, 1862.....	43,750 00
Less for interest on Appleton Extension bonds due Aug. 1, 1862.....	6,140 00
Less for interest on funded coupon bonds, due Nov. 1, 1862.....	26,460 00
Less for interest on debt.....	6,224 34
Less for exchange.....	570 65
Less for insurance.....	2,694 87
Less for taxes.....	779 73
Less on account Belville accident.....	390 50
Less for expenses of Directors.....	137 38
Less for expenses of New York office.....	4,430 39-407,397 31
Leaving surplus of earnings over operating expenses, and amount paid for interest on bonds exchange, &c., from April 1, 1862 to Nov. 1, 1862.....	\$233,164 59
Leaving balance to credit of income account being excess of earnings over operating expenses and amount paid for interest on bonds, exchange, &c., from June 1, 1859, to Nov. 1, 1862.....	\$795,779 91

DIRECTORY OF THE HOSPITALS

The SANITARY COMMISSION have established an office of information in regard to patients in the Hospitals of the District of Columbia, and of Frederick City, Maryland. By a reference to Books, which are corrected daily, an answer can under ordinary circumstances, be given by return mail to the following questions:

- 1st. Is ——— [giving name and regiment] at present in the hospitals of the District or of Frederick City?
- 2d. If so, what is his proper address?
- 3d. What is the name of the Surgeon or Chaplain of the hospital?
- 4th. If not in hospital at present, has he recently been in hospital?
- 5th. If so, did he die in hospital, and at what date?
- 6th. If recently discharged from hospital, was he discharged from service?
- 7th. If not, what were his orders on leaving?

The Commission is prepared also to furnish more specific information as to the condition of any patient in the District hospitals, within twenty-four hours after a request to do so, from an officer of any of its corresponding societies.

The office of the Directors will be open daily from 8 o'clock A. M. to 8 o'clock P. M., and accessible in urgent cases at any hour of the night.

The number of patients in these hospitals is about 25,000. If found to be practicable, the duty here undertaken locally by the Commission will be extended to include all the general hospitals in the country.

FRED LAW OLMSTED,

Adams House, 244 F St. Gen'l Secretary.
Washington, D. C., Nov. 19, 1862.

CARELESSNESS OF TRAVELERS.

Riding with elbows out of Car Windows. Although Passengers are carried with out fare, the Company must exercise reasonable care. What negligence of the Passenger will discharge the Company from liability.

The following case (*Robert M Todd vs The Old Colony and Fall River Railroad Company*) recently came before the Supreme Court of Massachusetts, on appeal from a judgment rendered upon the verdict of a jury awarding the plaintiff the sum of \$2,000 damages. The action was brought to recover compensation for injuries received by the plaintiff while traveling in the defendants' cars.

It appears that the defendants' road is located parallel with a track of the Boston and Worcester Railroad Corporation, and while the plaintiff was traveling in a passenger car of the defendants, and seated by an open window, the door of a freight car, which had been left by the Boston and Worcester R. R. Corporation standing upon their track, being unfastened, swung round and struck the plaintiff's arm with its projecting hasps and caused the injury complained of. The plaintiff was riding by permission of the superintendent of the defendants' road and the conductor of the train, without paying fare.

The plaintiff had claimed damages of the Boston and Worcester Railroad Corporation for the same injury, and his claim was referred to arbitrators, who made an award in his favor for \$1,000 and costs, which was duly returned in the Superior Court for Suffolk County in compliance with the terms of the submission, where it was opened, filed and entered, and was still pending, no further action having been had thereon. The cost of the arbitration was paid by the President of the Boston and Worcester Railroad Corporation.

The plaintiff's counsel contended on the evidence, that it appeared that the plaintiff's arm when it was struck was outside the window of the car; and asked the court to instruct the jury as follows:

First, that the award between the plaintiff and the Boston and Worcester Railroad Corporation operated as a bar to the plaintiff's claim upon the defendants. Second, that if the jury believed that the plaintiff's arm or elbow was out of the window of the car in which he was riding at the time when it was struck by the car door, or hasp upon it, of the Boston and Worcester Railroad Corporation, this of itself was such a want of due care on the part of the plaintiff that he could not recover. Third, that if the plaintiff was riding free of charge, and by courtesy, in the cars of the defendants, at the time of the accident by which he was injured, the defendants were not bound to observe the same degree of care and diligence toward the plaintiff as toward a passenger who paid fare.

The judge instructed the jury that the award was no bar to the present action; and that, although the plaintiff was riding without paying fare, the defendants, under the circumstances, were bound to the same degree of care and diligence toward him as if he had paid fare; and left it as a question of fact, for the jury, if they should find that the plaintiff's arm or elbow was outside of the car window when it was struck, whether he was using the care incumbent on him as a passenger.

The following is the opinion of the Court:

BIGELOW, C. J.—The award offered by the defendants constitutes no bar to the present action. It settles nothing conclusively between the parties. It is still open to revision by the court to which it was returned, and may be set aside or adjudged void, for any

good cause. It can have no greater effect than a verdict of a jury. It operates neither as a satisfaction, nor as a judgment. Assuming without deciding, that a judgment for a personal injury, against one of two joint tortfeasors would be a bar to an action against the other, there is no good reason for the position that the pendency of an action against one should operate as a bar to the maintenance by the party injured of a separate action against the other. The rule is well settled that co-trespassers are jointly and severally liable, and that separate actions may be maintained against them for their wrongful acts. Until a judgment against one has been obtained, it is uncertain whether the party injured will be able to maintain more than one action. Clearly it is no defence to show that another person committed the alleged wrongful acts in company with the defendant. It is difficult, therefore, to see how his liability is affected by the fact that his co-trespasser is sued for the same act, in another action. * *

Nor can it make any difference as to the effect of the award that the costs of the reference were paid by the Boston and Worcester Railroad Corporation. Such a payment can not be regarded as a part performance of the award. It was only a preliminary step, by which the corporation obtained possession of it from the arbitrators for the purpose of returning it into court. The validity of the award and the rights of the plaintiff under it were wholly unaffected by this act of the corporation, a fortiori, it can have no effect to bar the plaintiff from maintaining this action.

The instruction which the defendants asked concerning the degree of care and diligence which they were bound to exercise toward the plaintiff was rightly refused. If it be true that in certain cases a distinction is to be made as to the relative duty of carriers of passengers, toward those who pay for the transportation, and those who are carried gratuitously, it does not appear that the facts proved at the trial of this case rendered it material to call the attention of the jury to it. The defendants having undertaken to transport the plaintiff in their cars, were bound to the use of due and reasonable care in performing a duty which they had voluntarily assumed; and if, by omitting to take such precautions as were necessary and proper to prevent a person exercising due care from receiving an injury, the plaintiff was injured, he is entitled to recover compensation therefor.

The only error in the instructions of the court related to that part of the case which involved an inquiry into the position of the plaintiff's arm at the time of the accident. If he was then riding in the car with his elbow or arm projecting out of the window, by reason of which he sustained an injury, he was guilty of a want of due care, which would prevent him from maintaining his action. Looking at the mode in which railroads are constructed with posts and barriers which are placed very near to the track on which the cars are to pass, the rapid rate at which trains move, the manner in which cars are made, with seats to accommodate passengers so as to avoid any exposure of the body or limbs to outward objects in passing, we can see no ground on which it can be contended that a person traveling on a railroad is exercising reasonable care in placing his arm in such a position that it protrudes from a window and may come in contact with external obstructions. Certainly if it is want of due care to attempt to leave a car when the train is in motion, although going at a slow rate of speed, as has been heretofore determined by this court, it is no less a want of proper care to ride in a car with an

arm or leg exposed to collision against passing trains or the necessary structures on the side of the track. Nor was it the province of the jury to determine, as a matter of fact, whether the plaintiff used due and reasonable care, if it was proved that his arm or a portion of it was outside of the window at the time of the accident. If there was no dispute or controversy about this fact, and the position of his arm was the cause of, or contributed to the accident, the plaintiff failed to prove an essential element to the maintenance of his action. In such a state of evidence, it was the duty of the court to decide on its legal effect, and to say to the jury that the plaintiff had failed to make out his case.

We are therefore of opinion that the defendants were entitled to a more explicit instruction in answer to their second prayer than was given by the court, and that on this ground the verdict rendered in favor of the plaintiff must be set aside, and a new trial granted.

LA CROSSE AND MILWAUKEE RAILROAD.

At a meeting of the bondholders of the LaCrosse and Milwaukee Railroad, parties to an agreement made Oct. 3, 1861, held Nov. 6th, the following resolutions altering and modifying the said agreement of Oct. 3, 1861, were unanimously adopted:

Resolved, That the agreement made by us on the 3d day of October 1861, in accordance with the written recommendation of six out of the seven trustees therein named be, and hereby is, altered and modified in pursuance of the fourteenth section of said agreement, in the manner following, viz:

1. That if the company acquire the road of the Milwaukee and Western Railroad Company, commonly called the Western Road, then said mortgage may be for \$2,000,000 additional.

And if the company acquire the road of the Milwaukee and Horicon Railroad Company, then said mortgage may be for \$400,000 additional.

2. And for the purpose of authorizing the bondholders to vote, the company may issue scrip preferred stock to the same amount that it issues mortgage bonds to accompany said bonds, and full paid preferred stock, and common stock to the amount heretofore provided in the agreement: and for the purpose of acquiring the Milwaukee and Horicon Railroad, they may issue \$400,000 of full paid preferred stock, and \$250,000 full paid common stock in addition to the amounts above provided.

3. That such of the holders of the Milwaukee and Horicon Railroad first mortgage bonds, a first lien on that road from Horicon to Berlin, as surrender their said bonds to the trustees hereunder, shall receive new mortgage bonds of said new company at par, for the principal of their bonds and preferred stock of said company, for the interest due thereon up to Jan. 1, 1863.

4. That such of the holders of the City of Milwaukee bonds issued to or in aid of the Milwaukee and Horicon Railroad Company, as shall surrender them to the trustees hereunder, shall receive preferred stock of said new company for the principal and interest of their bonds up to Jan. 1, 1863.

5. That the balance of the unappropriated preferred stock and common stock issued for the purchase of the Horicon Railroad may be used at the discretion of the said trustees, in settlement of any liens on said consolidated property.

Proposed basis for recognizing the La Crosse and Milwaukee Railroad Company, the Milwaukee and Western Railroad Company (commonly called the Watertown Road), the Milwaukee and Horicon Railroad Company, under amended agreement of Oct. 3, 1861.

Sell the roads (except the Watertown Railroad) under decree of foreclosure.

Let them be purchased for the benefit of creditors assenting hereto, and assenting farm mortgage stockholders.

Form a new company to be called the Milwaukee and St. Paul Railway Company.

This company to make a new clean first mortgage over the consolidated property of the old companies of not exceeding..... \$6,600,000
To issue preferred stock not exceeding..... 3,400,000
To issue common stock..... 2,250,000
Cost of property (343 miles of railroad)..... \$12,250,000

Subdivision among the creditors of the old companies:

A land grant bondholder, No. 1a1,991, to get new first mortgage bonds for principal at par..... \$1,000
And his interest on preferred stock..... 250
A land grant bondholder, No. 1,992a3,350 of the \$1,000 bonds, and 1a100 of the \$500, to get in preferred stock for principal and interest..... 400
In common stock..... 400

A first mortgage bondholder, eastern division, will get new mortgage bonds for his principal, and cash for the interest due him.

A holder of city of Milwaukee bonds, issued to the La Crosse Railroad, will get new mortgage bonds for his principal, and cash for his interest.

A holder of city of Milwaukee bonds issued to the Horicon Railroad, to get preferred stock for principal and interest up to Jan. 1, 1863.

A second mortgage eastern division bondholder to get new first mortgage for 80 per cent..... \$800
And preferred stock for the balance due up to Sept. 1, 1862, say..... 480
A Horicon first mortgage bondholder to get for his principal a new mortgage bond..... 1,000
For his interest preferred stock, say..... 280

A Milwaukee and Minnesota stockholder to get for his stock 20 per cent. in new common stock.

A Helfenstein mortgage bondholder to get for principal and interest in common stock, 25 per cent.

A farm mortgage stockholder or bondholder to get, for the principal and interest, for the bond in common stock, 80 per cent.

MONETARY & COMMERCIAL.

The past week has been all in a ferment in the monetary world, from a desire to know just what would be the new policy of the administration, as developed in the annual message of the President and the report of Secretary Chase. The President recommends a national currency, based upon the deposit of Government stocks. Mr. Chase's plan seems to be to tax bank notes to such an extent, as to drive them out of existence, and substitute the national currency therefor. What we need most pressing is a victory by the national troops, which would revive the credit of the national currency, restore confidence in the permanency of the government, and insure the sale of a large amount of the five-twenty bonds. If Mr. Chase can persuade the military commanders to gain a great national victory, not a half way thing such as the late battle of Antietam, but a victory at-

tended with some advantage to the victors; and a serious loss to the vanquished, he will find his financial schemes will work like a charm. Money will be abundant, the Treasury well supplied, and Mr. Chase will hereafter be regarded as an able financier.

The demand for money in this city has been quite active with a good supply of currency, and consequently no increase in the rates. We quote good mercantile paper easy to negotiate at 8@10 per cent; other grades not saleable.

Exchange rates as follows:

	Buying.	Selling.
New York.....	1/2 @ 1/2 dis.	par
Philadelphia.....	1/2 @ 1/2 dis.	par
Boston.....	1/2 @ 1/2 dis.	par
Baltimore.....	1/2 @ 1/2 dis.	par
Gold.....	28 to 29 prem.	31 to 32 prem.
Silver.....	22 to 23 prem.	26 prem.
Demand Notes.....	22 to 23 prem.	....

Southern bank notes are selling at higher rates than heretofore. The advance of the Federal armies at the West is bringing out cotton, and considerable quantities are now arriving at this point. To pay for these, Kentucky and Tennessee bank notes are so much sought after that they command a premium of 2 1/2 @ 3 per cent. The New York quotations are:

Tennessee.....	90@95 per cent.
South Carolina.....	80 @85 per cent.
Georgia.....	80 @85 per cent.
Alabama.....	75@80 per cent.

Virginia and North Carolina are not called for.

The Price Current says of the hog business:

Hogs have arrived freely, and have met, on the whole, with a demand about equal to the receipts until Monday and yesterday, when a decline of fully 20@25c. was established. The houses packing on foreign account have bought freely, and with little or no intermission, and boxed meats for the English markets are being shipped largely, but the aggregate shipments are slightly behind those of last year at this date. The average weight of the hogs, which have been brought in the past week, is better than it had been previously, and is a full one, though not as great as it was last year; but it must be remembered that hogs last year were unusually large and fat, and the weight far above the usual average.

The demand for old mess pork has been fair at about former rates, \$10-75 for city brands, and \$10 to 10.50 for country. Green meats sell at 3 1/2 to 3 1/2 cts. for shoulders, 5 to 5 1/2 cts. for rib and clean sides, and 5 1/2 to 5 1/2 cts. for hams. Flour is quoted at \$5.00 to \$5.15, for superfine corn 45 to 46 cts. Oats 60 cts. for old in sacks. Whiskey 35 cts. Leather of all kinds, but especially harness is sought for. It has sold at 36 to 38 cts. during the week, closing at the latter figure. Bridles \$46 to \$50 per doz.

Thompson's Reporter gives the following advice.

Run in debt when the currency is contracted, but be sure you pay up when the currency is expanded.

From 1857 to the suspension of specie payments in December, 1861, a stringency bore upon the currency, credits, and trade of the country; and even after the suspension, for some months, the contraction continued, for the reason that until treasury notes were made a legal tender currency, there was no safe way of evading specie payments. On the 25th of February, 1862, the act making treasury notes a legal tender was passed; there being then sixty millions of demand notes outstanding, all of which were made legal tender, debtors of all classes, including banks of issue, were relieved from the danger of specie demands.

We may therefore date the commencement of the expansion from the 1st of March, 1862, not yet nine months ago.

During this time the increase of Government paper money has been, in round numbers, one hundred and thirty-five millions; bank paper money, sixty-five millions; making a total of two hundred millions; and we may safely say that another two hundred millions of expansive element, in the shape of government notes, certificates, bank deposits, individual credits, &c., have been added to the money bubble of the day.

The volume and velocity of this expansion admonishes us that it may culminate in an unprecedentedly brief period of duration.

The question as to when is the right time to pay up and get out of debt is an interesting one.

The philosophy of running in debt and paying debts is worthy of more study than the American people give it. We may safely say that nine-tenths of our business people rush into debt when it is easy to do so, and then are compelled to pay when it is hard to do so.

It will do to run in debt when a contraction has carried prices to a cheap point; but when prices are high by reason of an expansion, pay up; and if you have the heart to make others suffer for your benefit, get them to be your debtors, that you may make them pay when dollars are scarce and property is cheap.

We do not say that the expansion has reached its maximum, or that it is the best time to pay up. We see no way for the Government to do but to continue its legal-tender issues, and the banks will not have occasion to contract so long as "legal-tender" is abundant and available as redemption money.

Our object is only to turn the attention of our readers to the subject of the paper-money bubble, that they may take such action as their interest may seem to require. It is a good time to get out of debt, but whether the best time has arrived is, in our opinion, very doubtful.

The following decision of the Commissioner of Internal Revenue in regard to stamps will be found of interest:

Section 94 of the excise law requires that on and after the first day of October, certain stamp duties shall be collected on all instruments, matters, and things as describable in schedule marked B.

Section 95 provides that if any person or persons shall make, sign or issue or cause to be made, signed or issued, any instrument, document or paper, of any kind or description whatsoever, without the same being duly stamped for denoting the duty imposed thereon or without having thereon an adhesive stamp to denote the duty, such person or persons shall incur a penalty of \$50, and such instrument, document or paper shall be deemed invalid and of no effect. It seems to me perfectly clear that by the provisions of section 95, the person who makes, signs and issues

the instrument is the only person authorized to affix the stamp required by law, and the person who makes, signs and issues &c., without affixing the stamp, incurs the penalty as aforesaid, and is liable to prosecution therefor, and the instrument or document is invalid in consequence of such neglect.

Section 99 provides that the person using or affixing the stamp shall write thereupon the initials of his name, date, etc. Other portions of the law impose penalties upon persons who receive documents or articles subject to stamp duty from the person who makes, signs or issues them without being duly stamped.

I am therefore of opinion that a faithful compliance with the requirement of the provisions of the Excise law demands—

1st. That all papers subject to stamp tax shall have the stamp affixed before the same is issued.

2d. That the stamp so affixed must be canceled in the manner prescribed, by the party making, signing, or issuing, in other words, executing the instrument, document or paper.

Hence, the receiving of a non-stamped paper is a violation of the law. The attaching and canceling of a stamp on a document so received is also unlawful, and the cancellation of a stamp on a paper otherwise lawfully issued, by other than the party executing the paper to which the stamp is affixed, is equally improper.

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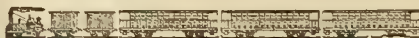
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At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11. P. M., Express.
On Sundays at 3.30, A. M., and 11. P. M.
Leave Baltimore for the North and West daily, at 8.30, A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail; and 7.00 P. M., Express.
On Sundays at 7. P. M., only.

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Most Reasonable Terms.]

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, DECEMBER 11, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

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A square is the space occupied by ten lines of Nonpareil.

One square, single insertion.....	\$1 00
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
“ column, single insertion.....	5 00
“ “ per month.....	10 00
“ “ six months.....	40 00
“ “ per annum.....	80 00
“ page, single insertion.....	15 00
“ “ per month.....	25 00
“ “ six months.....	110 00
“ “ per annum.....	200 00

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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—		
	Depart.	Arrive.
Cincinnati Express.....	6 30 A. M.	9 20 P. M.
Mail and Express.....	8 30 A. M.	6 20 P. M.
Columbus Accommodation.....	4 00 P. M.	11 05 A. M.
Morrow Accommodation.....	6 00 P. M.	8 00 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	8 00 A. M.	9 50 P. M.
Dayton & Sandusky.....	6 30 A. M.	6 45 P. M.
Dayton & Toledo.....	6 35 A. M.	11 40 P. M.
Richmond & Dayton.....	3 15 P. M.	6 45 P. M.
Dayton, Lima, Toledo & Huntsville.....	5 20 P. M.	10 55 A. M.
Cin. & Chicago Air Line Exp.....	7 00 P. M.	8 15 A. M.
Hamilton Accommodation.....	7 00 P. M.	6 55 A. M.
Eastern Night Express.....	10 00 P. M.	6 40 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	6 30 A. M.	6 45 P. M.
Delmontaine Accommodation.....	5 20 P. M.	10 55 A. M.
Marietta & Cincinnati—		
Mail.....	9 00 A. M.	5 35 P. M.
Accommodation.....	3 30 P. M.	10 15 A. M.
Ohio & Mississippi—		
Mail.....	5 00 A. M.	10 05 P. M.
Express.....	5 00 P. M.	5 53 A. M.
Indianapolis & Cincinnati—		
Mail.....	6 00 A. M.	11 00 A. M.
Chicago Express.....	7 10 P. M.	9 20 A. M.
Dayton & Michigan—		
Tolstoi, Detroit & Chicago Exp.....	6 30 A. M.	11 40 P. M.
Toledo & Chicago Express.....	5 20 P. M.	10 55 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	8 00 A. M.	8 50 P. M.
Night Express.....	7 00 P. M.	8 15 A. M.
Cincinnati, Wilmington & Zanesville—		
Morning Express.....	10 00 A. M.	6 45 P. M.
Accommodation.....	6 00 P. M.	8 00 A. M.
Kentucky Central— (City time.)		
First Train.....	6 30 A. M.	10 44 A. M.
Second Train.....	2 20 P. M.	6 44 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

INDIANAPOLIS & CINCINNATI R. R.

This important road has long been endeavoring to secure an independent entrance into the city, which was finally accomplished by the purchase of the Whitewater canal. Although the great idea was thus realized, yet, for the purpose of obtaining a more central location for their passenger depot, a petition was made to the City Council for a lease of the Pearl street market house and market space, on which the Railroad Company proposes to erect suitable depot buildings. The Pearl street market has never been used for the purpose for which it was designed, and in all probability never will, as any one familiar with its surroundings will be ready to admit, and we are disposed to think that all will be heartily glad to have it turned to some useful purpose; certainly such will be the feelings of those who may have occasion to travel over the useful road of the I. & C. R. R. Co. The following is the action had by the Council.

Mr. Bartlett presented the report of the majority of the committee.

GENTLEMEN—The Committee to whom was referred the petition of the Cincinnati and Indianapolis Railroad Company, asking for the privilege to build upon and occupy, for an indefinite number of years, the two squares of Pearl street, between Central Avenue, Plum and Elm streets, one of which is now occupied as a market house and the other as a market space, and your Committee—being fully aware of the great importance of the subject to the citizens generally, and those in the immediate vicinity more particularly—have had various meetings with the President, Engineer, and some of the Directors of the Road, and after surveying the grounds and all the interests connected therewith, beg leave to report adversely to the petition, for the following reasons:

1. Your Committee have ascertained that the Company intend laying their rails on a level with the bottom of the present canal basin, and to cross Central Avenue and Plum street, it would be necessary to build elevated bridges over the same, both an inconvenient and dangerous impediment, and always to be avoided when possible, in great thoroughfares daily traveled by thousands. Again, those streets are the drainage for large bodies of water, which, if bridges are built, will have to be conveyed to other parallel streets, or sewers built for their special use by the city—another constant source of expense.

2. Your Committee, seeing the rapid strides that the wholesale business on Pearl street has made westward during the past few years, are satisfied that but a very short time will elapse ere the noble stone blocks that now grace that street will, in all probability, be extended to the Whitewater basin, and to have a railroad depot in front of such houses would be a serious objection, if not altogether stop the erection of such buildings; not but what your Committee freely admit that business of other kinds would gradually find profitable location there; and your Committee are satisfied that it would be much to the interest of the city, and, perhaps, equally so for the Railroad Company, to erect their passenger and freight depots on and over the present Whitewater basin, which is between 1,000 and 1,200 feet long, and the streets on either side of which are

nearly twenty feet wider than those aside from the market house, a great desideratum, giving ample room for the multiplicity of business generally surrounding railroad depots, and thus enabling the petitioners to locate their depot four or five squares nearer the heart of business than any other railroad that enters the city; and further, your Committee being aware that, by a resolution of the City Council, offered April 27, 1838, and finally passed May 11, 1838, they gave the right and privilege to the Whitewater Company to use the ground now occupied as such for canal purposes, would earnestly recommend that for a fair and equitable consideration (say about one-fourth the amount of interest the city now pays annually on the \$400,000 Whitewater Bonds), they should continue the same to the Cincinnati and Indianapolis Railroad Co., and grant them the right and privilege to transfer the same from canal to railroad purposes; and further, your Committee have ascertained from the books in the Auditor's office, that it has cost the city, on an average, for the last four years, \$3,000 per annum to keep the bridges over the Whitewater Canal in repair, which the petitioners do not propose to do, and should, perchance, their prayer be granted, it would virtually be giving them the two entire squares (worth from \$80,000 to \$100,000) for the privilege of keeping the bridges over the railroad in repair. All of which is respectfully submitted.

NATHANIEL BARTLETT,
C. SCHULTZ, C ommittee.

By leave, Mr. Stokes had the following report, from a minority of the Committee, read by the Clerk:

To the City Council of the City of Cincinnati:

GENTLEMEN—Your Committee on Claims and Finance, to whom was referred the memorial of H. C. Lord, President of Cincinnati and Indiana Railroad Company, report:

That, after an examination of the premises, with the aid and advice of the City Engineer, believe there is no practical objection to the occupation of the Pearl street Market place for the purpose set forth in the memorial, and that the property in the vicinity will not in any way be damaged; but on the contrary, benefitted; that the general business of the city will be thereby accommodated, that the terms proposed are reasonable, and should be accepted by the city.

They would further state, that the construction of an independent line of railroad from the City of Cincinnati to connect with the Indianapolis and Central Railroad, at or near Lawrenceburg, in the State of Indiana, would open a new and independent line of communication to the Mississippi river, at Seton and St. Louis, thereby protecting the city of Cincinnati against a large division of traffic at Indianapolis, over lines of railway running north of, and thereby injurious to the interests of this city.

The Indianapolis and Cincinnati Railroad, under its existing arrangements with the Ohio and Mississippi Railroad, is and has been precluded from doing any business to or from St. Louis and the State of Missouri with Cincinnati; and that the proposed line will benefit this city by securing the good will of the lines west of Indianapolis, and their co-operation in bringing business to this city that now finds other marts; therefore all reasonable encouragement should be afforded to the company represented by Mr. Lord.

Your committee would further state that in their judgment the Whitewater Canal, within the limits of the city, is of very little if any advantage to the business or property of the

city, but on the contrary might, with propriety be called, in this age of improvement, a nuisance, and that its abandonment and the substitution of the proposed railroad, is an enterprise that should be encouraged and commended by this Council on fair and equitable terms. They therefore ask the adoption of the following resolution.

(Signed) SAMUEL STOKES.

Mr. Stokes then asked that the following communication be read, which request was granted:

OFFICE OF CINCINNATI AND INDIANAPOLIS
RAILROAD COMPANY,
CINCINNATI, December 8, 1862. }

Messrs Stokes, Bartlett, and Shultz, Comr.

GENTLEMEN.—The Cincinnati and Indianapolis Railroad Company desire to lease the property known as the Pearl street market-space, and to employ the same for depot buildings for the passenger trains of its road exclusively.

The Company proposes to run its road on the ground covered by the White Water Canal to Central Avenue, thence through the said market-space upon such a grade or level from Wood street east as shall be approved by the Chief Engineer of the city.

The Company will convert the present market house into a passenger depot, provided the building and foundations shall be found to be sufficiently strong. The Company will inclose and protect its track from its eastern terminus to the city limits in a substantial manner. The Company will permit other railroads to run their passenger trains to and from said depot, upon the payment by such other roads of a reasonable compensation for the use of this Company's track, depot, grounds, and buildings.

For a lease of ninety-nine years of said market-space, for the purposes herein specified, and for a release to this Company of any right of way over, or reversion which the city may have to the lands now covered by the canal within the city limits this Company will pay the following rental, to-wit: For the first five years, \$3,000 per annum; for each succeeding year, \$4,000 per annum—the rent to be paid quarterly.

Very respectfully, Yours,
H. C. LORD, President.

Mr. Stokes then offered the following:

Resolved, That the proposition of the Cincinnati and Indianapolis Railroad Company, through H. C. Lord, its President, for a lease of the Pearl street market-space, be and is hereby accepted, and that the City Solicitor and City Auditor be and are hereby authorized to have prepared, executed and delivered, a lease with and to the said Cincinnati and Indianapolis Railroad Company, in accordance with the terms of said proposition, setting forth that the rental mentioned therein shall be promptly paid quarterly, and secured to the city to the satisfaction of said Auditor, and Solicitor.

A communication was also read from sixty-three of the property holders and merchants on Pearl street, declaring it as their conviction, that they would not be damaged by the occupation of the market-space for a railroad depot and closing with the hope that the application of the Cincinnati and Indianapolis Railroad Company would be granted.

Mr. Gibson approved of the project, but could not accede to the terms proposed; the rate of the proposed lease was not more than a good store would bring. The subject needed further consideration.

With but few remarks from other members, the reports and resolutions were laid upon

the table. Subsequently, however, on motion of Mr. Walker, they were referred to the City Solicitor, in connection with a special committee of three—Messrs. Walker, Perry, and Hayden.

NORTH MISSOURI RAILROAD.

We are indebted to J. H. Concannon, Esq., General Ticket Agent of this road, for a copy of its annual report for the year ending April 1, 1862. We give such parts of it to our readers as we think will interest them. The report says:

On the 1st of April, 1861, when the present Directors were placed in charge of the management of the North Missouri Railroad, the then Auditor submitted a statement, showing the following floating indebtedness on the part of the Company:

Audited vouchers and pay rolls.....	\$66,332 63
Bills payable.....	12,671 67
Due Senelectary L. Comotive Works.....	3,111 50
Balance due City of St. Louis on account of suit compromised.....	879 00
Due on cattle claims, about.....	5,000 00

Floating debt due by the Company, 1st April, 1861.....\$87,924 00

This sum did not embrace interest due by the Company to the State of Missouri, or to the City and County of St. Louis, which the Company had then and have still failed to pay from want of ability. The road was not completed to the Hannibal and St. Joseph Road when the available stock subscriptions were exhausted, and it forfeited its right to receive further State aid; so that, to equip it properly with rolling stock and to complete work requisite for its operation, the Company has been compelled to use its surplus means, and consequently could not pay interest. There is a great deal of work yet to be done to make it a completed road to the junction, which the Company propose to do as its means will enable it; among the most important of which is the making of an improvement at Saint Charles, which will enable it to cross its freight cars at this point without unloading them.

The assets of the Company on the 1st of April, 1861, were reported by the Treasurer to consist of the following items:

Cash on hand.....	\$ 4,863 61
Due by Stockholders.....	129,888 79
Real estate.....	83,297 41
Bills receivable.....	4,974 04
Post Office Department.....	8,890 22
Bank of Commerce.....	1,217 70
St. Charles Ferry Company.....	7 00
Due by individuals.....	1,079 59
Suspense account.....	100 93

Total.....\$274,341 29

From these assets the Company realized during the year ending 1st April, 1862, as follows:

From Stockholders.....	\$ 697 00
" real estate.....	500 00
" bills receivable.....	2,532 31
" Post Office Department.....	8,890 22
" Bank of Commerce.....	0 00
" St. Charles Ferry Company.....	7 00
" due by individuals.....	49 00

Total.....\$12,675 53

The heavy floating debt of \$87,924 was mostly due to needy laborers and to persons who had furnished supplies, who, fearing they would never be paid, gave great annoyance.

Shortly after taking charge of the road, the then Executive of the State, with the Board of Public Works, called upon its officers for a statement of its condition, with the view of advertising it for sale, remarking, at the same time, that similar statements were being obtained of the Pacific and St. Louis and Iron Mountain Roads for the same purpose. The rumored intention on the part of the State to sell the road tended to increase the general uneasiness of employees, and many left the service of the Company, because they felt that, in justice to themselves and their families, they could no longer afford to work when there was so much doubt as to ultimate payment.

The financial difficulties that surrounded us at the time we took charge of the road were appalling enough, and were calculated to almost discourage us from any efforts to extricate the road from its embarrassments; but, added to these, our national troubles were daily assuming a more and more alarming aspect, and distrust, doubt, and excitement pervaded all minds in consequence. Under these circumstances, it is not easy fully to comprehend the difficulties of managing an embarrassed railroad, passing through a disloyal country.

Such was the state of public feeling along the line of the road, that at several points the United States Mail Agent was warned that his life would be in jeopardy if he attempted to discharge his duties. Every effort was made by the President of the Company to allay the excitement and induce the people not to attempt to set at defiance the power of the Government. The press of St. Louis made appeals to them, and no outbreak of a very serious character occurred until after Gov. Jackson fled from the city of St. Louis, and issued his proclamation for fifty thousand men, and ordered the railroads of the State to be destroyed.

The President of the Company, fearing the evil consequences that might be produced by this proclamation, accompanied the train of cars on which it was carried to the people along the line of the road. He used every means in his power to arrest the excitement; urging the citizens to follow their peaceful vocations; exhorting them, above all things, not to create public disturbance, nor to destroy public property, and especially to let the railroad remain uninjured. He assured them that if they acted on the advice he gave them, no United States troops would be sent among them, and he felt warranted in giving this assurance from conversations he had held with United States Army officers.

On his return to St. Louis he was confident his advice would be adopted, and so reported. At his instance, an editorial appeal was made to the people to keep the peace, and, in fact, no effort was spared on his part to save them from the horrors of civil war. All went unheeded, and a few wicked men, acting under

instructions, as it afterwards appeared, from Gov. Jackson, broke the peace of this section of the State by setting fire to Young's Creek, Sturgeon and other bridges and culverts. This damnable work was inaugurated under the leadership of a Capt. Absalom Hicks, Dr. Samuel A. Peters, and others; and to them, acting under orders from the Executive of the State, was this road indebted for the first injuries done to it, and the people for the first troops that came among them.

The moment the President learned that the destruction of the road had begun, he applied for military protection, and afforded all the facilities in his power for the transportation of the troops. He was at the Arsenal every day seeking this protection, and Col. Harding was anxious to afford it. Gen. Lyon was absent, and Col. Harding was acting in his stead. Troops were then needed, for this and other service, beyond the ability of the Government to supply them. Gen. Fremont had been appointed to this Department, but had not arrived, and Gen. Pope, who was next in command, was in Illinois, discharging duties devolving on him there. In this state of things Col. Harding found himself embarrassed for want of troops, and, expecting Gen. Fremont, he did not desire to dispose of the small force at his command without advising with him or Gen. Pope. He therefore authorized the President to telegraph Gen. Pope, in his name, the condition of things on the North Missouri Road, and the want of troops to occupy it.

On the receipt of this despatch, Gen. Pope at once repaired to the State, and the whole road was occupied by troops—not, however, until many other bridges and culverts had been destroyed.

The forces raised by Harris, Green, and others, for the Confederate service, kept this portion of the State in constant uneasiness and distress. Bands of the Confederates, or troops of the United States, have been alternately occupying it, and no person can realize how much this people have suffered from allowing their peace to be disturbed by reckless men among them. Malignants who brought, or who aided in bringing on, these misfortunes, have a fearful responsibility resting upon them. The unmarked burial places of those who have fallen in this unholy struggle; the anguish of the widows and orphans left without protection, perhaps without means of subsistence; the charred and ruined remains of once happy homes, and the blighted prospects of hundreds of families, arouse the most painful contemplations, and lead us to reflect with horror on the acts of persons who were foremost in attempting to overthrow and set at defiance the authority of a wise and beneficent Government.

In a short time after the occupation of the line of the road by the forces under Gen. Pope, comparative quiet was restored. Gen. Pope's forces were withdrawn for duty elsewhere, and the vigilance of the Government was not

deemed necessary by its officers, or the protection, we presume, would have been continued.

Justice requires us to state that the Hon. O. Guitar and the Hon. Jas. S. Rollins of Boone county, Col. Krekel of St. Charles, and the President of this Company, made every effort to induce the Government to continue its protection to the road by building block-houses at the principal bridges and having them occupied by troops, and by having a body of some two thousand cavalry to patrol the country south of the Hannibal and St. Joseph road and between the Missouri and Mississippi rivers. Those having authority to grant what was asked were so occupied with other duties, and there being such apparent quiet on the road, they could not be impressed with the importance of continuing the protection; and the result was the plot of the 20th of December, 1861, by which the destruction of the road was accomplished, and which proved how much the generous confidence of the Government had been misplaced.

Accompanying this report is a statement showing the loss sustained in June, July, and December, of 1861, amounting to \$86,310 00. This large sum of money should not be lost to the Company, and it will be a matter to be determined by our successors whether they will resort to the tardy process of civil suits to recover the amount, or whether they will ask its assessment on the counties that furnished the men for the destruction of our property, or what course should be adopted to obtain proper redress in the premises. If an assessment be made, it should embrace counties off of the road, as, in some instances, they furnished the larger part of the men for the work.

The state of warfare existing along the line of the road during the past year has reduced, to a great extent, the receipts from passengers and also from freights. It may be well, however, to state in this connection, that in no instance has a civilian been molested on any of our passenger trains, or injured in any way, during all these troubles; nor has injury occurred to any passenger in the eight years that passenger trains have been running on the road.

It is to be hoped and is believed that there will be no further interruption. While, however, the troubles of the country last, it will be essential to keep a military force on the road for its protection, as a few bad men, without anything at stake in the community, having evil inclinations, may, if not watched, bring again suffering and trouble on the people among whom they live, and to whom they are both a curse and a scourge.

The blockade of the Mississippi river, the southern outlet for the products of this section of the State, and the consumption by the troops occupying it, of much that it produced, deprived the Company of a large amount of regular business. St. Louis remained no longer a market, nor were the usual amount of sup-

plies purchased by the people of Northern Missouri, although the crops of the year past were better than for many years before. The Company has thus, during the past year, lost a great deal of business that it would have received, both from freight and passengers, if there had been a market and quiet country.

Notwithstanding the civil disorders that have existed along the line of the road, affecting seriously its business, the financial troubles experienced by the Company for some time after the present Board entered upon their duties, and the loss by the destruction of property, we have managed to sustain the road through all, and are able to present a very favorable exhibit compared with other years.

The receipts of the road for the year ending 1st April, 1860, were \$332,918 00
Expenditures for same period 275,336 50

Net receipts for the year \$ 57,581 19

The receipts of the road for the year ending 1st April, 1861, were \$341,800 92
Expenditures for same period 252,901 44

Net receipts for the year \$ 88,899 48

The receipts of the road for the year ending 1st April, 1862, were \$353,577 33
Expenditures for the same period 175,357 50

Net earnings for the fiscal year ending 1st April, 1862 \$ 78,219 82

While this shows a loss of \$87,683 59, in the gross earnings of the road on its regular business for the year ending 1st April, 1862, compared with the previous year, the profits for the same period on nearly a hundred thousand dollars loss of business are within \$10,079 66 of the preceding year, and the Company has repaired the destroyed road and made many valuable improvements, some of which will hereafter be referred to, and all of which are included in the expenditures for the year of \$175,357 51.

The expenditure during the past year, \$77,608 93 less than the year before, was occasioned to some extent by the purchase of rolling stock, and the making of improvements essential to the operation of the road by our predecessors.

As before remarked in this report, the road was not completed to Macon City, which is the point of its junction with the Hannibal and St. Joseph Road, when it ceased to receive State aid, and then it was greatly deficient in rolling stock, station houses, and many other requisites for its successful operation, all of which the Company have not, up to this time, been able to provide for out of its surplus earnings. As fast as its means justified us, these wants have been supplied.

We have shown our net earnings on our regular business for the fiscal year ending 1st April, 1862, were \$ 78,219 82
Add to the net receipts on our regular business the amount earned during the year from the Government for the transportation of troops (the exact sum not now known) not less than 110,000 00

And we have for the net earnings of the year to April 1, 1862 \$183,219 82

This sum, as far as collected, has been applied to paying off the floating debt existing at the time the present Directory took charge of the road; to paying for the reconstruction of the road after its destruction; to extending

it so as to connect with the St. Louis and Iron Mountain Road; to fitting up and making comfortable the depot at Macon City, and a covered passage walk from the Hannibal and St. Joseph Road to our depot at the junction; to the building of large and commodious wood sheds; and to other valuable improvements which the interests of the Company required.

Just prior to the destruction of the road in December, it was the hope of the Directory that they would be able to save from the net earnings of the Company an amount sufficient to iron the road some ten or fifteen miles above its junction with the Hannibal and St. Joseph Road, the grading being already done. This would have enabled the Company to obtain a large amount of business without being brought into competition with the Hannibal & St. Joseph Road for it. All efforts thus far to extend the benefits of a railroad to the people above the junction of the roads have been defeated. We trust, however, that few years will elapse before this desirable object to them, to the State, to St. Louis, and to the Company, may be accomplished. Not less important to all the interests we have named is the building of the Missouri Valley Road, from our road in Randolph county, to St. Joseph. The construction of both these extensions of the North Missouri Railroad we still regard as feasible.

If the next Legislature will grant to this Company authority to issue first mortgage bonds for three millions of dollars, one million of it would enable this Company to complete its road to Iowa, above its junction with the Hannibal and St. Joseph Railroad, and to make improvements for crossing the freight cars at St. Charles without unloading them, and the other two millions would secure the completion of the Missouri Valley Road.

The extension of the road above the Hannibal and St. Joseph Road to the Iowa State line would be a distance of about seventy miles. The extension of the road by what is called the Missouri Valley Road to St. Joseph would be a distance of about one hundred and sixty miles. The length of the road now completed is one hundred and seventy miles. With the two extensions completed we should have four hundred miles of road in operation to secure a loan of three millions of dollars. With these extensions completed, it is not, we think, unreasonable to assume that this road would not only be able to earn the interest on the three millions of first mortgage bonds, but, in all probability, on the amount of State credit which has been granted to it.

With the Missouri Valley Road completed, the North Missouri Road would no longer be a dependency on another road to get its business to St. Joseph, but would be able successfully to compete for all business going to or coming from the far West, and bring it to the great commercial metropolis of Missouri, St. Louis.

From the statement submitted by the Treas-

urer of the North Missouri Railroad Company, which is presented with this report, it will be seen that when the United States Government has paid its indebtedness, we shall have on hand a surplus of means amounting to about \$51,700 with which to add to our rolling stock, and make some important repairs and improvements on the road.

It is well, perhaps, to call attention in this report to the facts that the North Missouri Railroad has received much less aid from the State per mile, and has cost much less per mile in the aggregate, than the other trunk roads of the State; that it passes through a very fine agricultural country, rapidly filling up with an industrious and thrifty population; that it is without any rival to compete for business, and has the Hannibal and St. Joseph Road as a partial feeder; it has far less to earn than any other trunk railroad to enable it to pay the interest due on the State debt, and we feel confident that if it was extended to Iowa, and the Missouri Valley Road built to St. Joseph, its net earnings would pay the interest on the first mortgage bonds required for these extensions, as well as on the credit of the State granted to it. We trust the means may be devised for making these extensions.

The officers of the Company for the current year, 1862-1863, are:

DIRECTORS, elected first Monday of April, 1862, to serve until first Monday of April, 1863.—Andrew Harper, John O'F. Farrar, Henry S. Reed, Josiah Fogg, Michael Powers, Joseph C. Barlow, Isaac H. Sturgeon, St. Louis City and County; John Orrick, St. Charles County; Frederick Morsey, Warren County; James H. Robinson, Montgomery County; John P. Clark, Audrain County; James S. Rollins, Boone County; Napoleon B. Coates, Randolph County. Isaac H. Sturgeon, President and Superintendent; Andrew Harper, Vice-President; Joseph H. Gamble, Master of Transportation; J. H. Concannon, Treasurer and General Ticket Agent; Logan Tompkins, Secretary and Auditor; George Snyder, Road Master and Master of Bridges and Buildings; James Seath, Master Machinist; John Flynn, Paymaster and Supply Agent; Chas. Bender, Land Agent; Thos. J. Hardin, Wood Agent.

THE NATIONAL DEBT.

Much interest and anxiety are now manifested as to the rapid increase and enormous amount of our national debt—partisan leaders, on the one hand, claiming that we are in no danger of being overburdened, and on the other, that the nation will soon be bankrupt. In the heat of discussion and the zeal to carry party ends, the truth is not very likely to be brought forward by either party, and facts are often misstated. A writer in the *Cincinnati Commercial*, over the signature of Observer, gives the following comparative statement of the debt of the United States, Great Britain, and France. As the figures are taken from

official sources, the comparison may be regarded as a very fair one:

The National Debt and Resources of the United States, compared with those of Great Britain and France.

DEBT OF ENGLAND AND IRELAND.

	Millions Sterling.
British Debt in 1775.....	£128 0 10
Contracted during American War.....	121 2 10
Debt in 1784.....	219 8 19
Paid from 1784 to 1793.....	10 5 10
Debt at beginning of French War.....	299 3 10
Contracted during the French War.....	601 5 10
Debt, funded and unfunded, Feb. 1, 1817, Cancelled from Feb. 1, 1817, to March 3d, 1859.....	840 8 10
	35 7 10
Total Debt of United Kingdom, March 31, 1859.....	£203,678,554 0 0
At \$184, Mint price of pound sterling.....	\$3,698,085,041 40
Total Funded Debt, March 31, 1859.....	£995,801,154
Exchequer Bills outstanding.....	13 077 4 0
Exchequer Bonds.....	5 0 0 0 0
Total.....	£502,378,584
Interest on Funded Debt in 1859.....	33,611,055 at 3 per cent.
Annuities.....	4,083,729
Management of Debt.....	90,019
Charged on Debt and Annuities in 1859.....	£27,724,804—\$134,138,051 00
Interest on Exchequer Bills at 1½d. per diem.....	734,183
Interest on Exchequer Bills, at 3½ and 3¼ per ct. per an.....	156,250
Total.....	£28,615,207—\$138,463,081 00
British Debt per capita.....	\$134 24
Annual Charge of Debt per capita.....	4 77
The British Debt, per capita, in 1861, was	193 60
Average Annual Interest of Debt from 1796 to 1817.....	\$121,273,378 90

DEBT OF FRANCE.

	Francs.
Consolidated Debt, Jan. 1, 1857.....	8,531,924,466
Floating debt, bearing int.....	773,521,903
Floating debt, not bearing int.....	79,415,240
	8,584,929,566—61,705,966 476
Interest and charges on Debt, 1855, \$100,323,176 (nearly 6 per cent.).....	\$ 240,000,000
Debt in 1814.....	1,200,000,000
Debt in 1851.....	1,703,100,000
Average increase per annum from 1817 to 1851.....	26,000,000
Average increase per annum from 1851 to 1857.....	84,000,000
Increase from Jan. 1, 1850, to Jan. 1, 1857.....	115,000,000
Estimated increase since Jan. 1, 1857.....	10,000,000
Public debt on Jan. 1, 1862 (estimated).....	2,206,000,000
At six per cent interest per annum.....	132,360,000
Debt, per capita.....	61 28
Annual Interest, per capita.....	3 67

DEBT OF THE UNITED STATES.

Total debt, July 1, 1861.....	\$90,867,823
Loans and Treasury Notes of the current year, realized before December, and now outstanding.....	184,304,839
Debt on December 1, 1861.....	\$275,233,665
Further required for the services of the fiscal year.....	242,140,136
Debt to July 1, 1863, Sec's estimate.....	\$517,372,833
Interest on debt for current fiscal year.....	29,932,696
Debt per capita (Population at 31,000,000 July 1, 1862).....	\$16 70
Int. per capita.....	22 50
Int. per capita.....	31 9 0 0 0
for cur. year.....	23 000 0 0 0
Total debts of the several loyal States.....	\$166,286,276
Per capita.....	\$7 20
Total debts of the several rebel States.....	\$ 93,634,695
Per capita.....	\$11 87
Total United States.....	\$264,921,272
If the total National Debt on July 1, 1862, should fall upon the loyal States, added to their own State debts, the amount would be.....	\$653,659,078
Charges upon 13,000,000 loyalists, per capita.....	\$30 00
The annual interest upon the aggregate Debts.....	\$11,437,060
The annual interest of aggregate debts per capita.....	\$1 91
The total population of loyal free States, Add Maryland, Delaware, District of Columbia, Western Virginia, Kentucky, and Missouri.....	19,145,364
	3,760,075
Total population of loyal States.....	12,911,439
Total population of seceded States.....	8,333,705
Total.....	31,245,144

Slaves in seceded States, 3,571,057; slaves in loyal States, 428,296.

RECAPITULATION.

	British	French	United States, July 1, 1867	Changed to loyal States	Loyal States charged with the whole National and their own State debts
Population	59,000,000	36,000,000	31,000,000	53,000,000	23,000,000
Debt in millions of dollars	3,900 6-10	2,200	517 4-10	517 4-10	683 0-10
Annual Interest	134,188,651	132,330,000	29,232,996	29,272,803	44,437,000
Debt per capita	\$134 34	61 28	16 70	22 00	30 00
Interest per capita	\$4 77	3 67	91	1 10	1 93

The National Debt of Great Britain, with a less population, is more than seven times greater in amount than that of the United States on July 1, 1862—eight times greater per head, and the annual charge five times greater.

The debt of France is more than four times in amount greater than the United States, and four times greater per head, and a four times greater burden in annual interest.

With these facts and figures, the people of the United States need not be alarmed, for the burden they are compelled to bear is thus far comparatively light.

The above detailed statement furnishes clear and satisfactory data that the U. States is on a high road to unbounded wealth and prosperity, notwithstanding the amount of our present and prospective national debt.

The fears that have been awakened in many quarters, and discussed in some of our leading journals, respecting the United States fast drifting into hopeless insolvency on account of the issues of her irredeemable paper currency—*indirectly redeemable, however*—make it my purpose now to offer a few common-sense remarks; and with this view I intend to deal simply with financial principles, letting the detailed matter connected with the adjustment and administration of our National finances suggest themselves.

The immediate motive that has prompted this communication is the fact of a *memorial*, largely and extensively signed by merchants, financiers and bankers, of New York City, to be forwarded to Congress when next assembling.

The citizens of New York City are noted for their change of purposes, and no sooner devise, form and recommend plans to suit their supposed interests, than they are immediately ready to substitute others, with perhaps less reason than for their formation.

The present memorial is clearly an attempt to make the Government subservient to their wishes, and compel it to purchase gold, now so long accumulating in New York city, to redeem its issues, and pay interest in gold on its bonds.

This proposition is veiled under the disguise

that it would be far more economical for the United States; for the interest on the contemplated bonds to be issued is fixed at four and a half per cent.

A statement has been made, that on two thousand millions of dollars, the above fixed rate of $4\frac{1}{2}$ per cent. would amount to ninety millions, whereas the present rate of six and seven per cent. would require one hundred and twenty millions, making thereby a saving of thirty millions of dollars in interest for the Government. This theory, or supposed statement of facts, would be true, were an interest of 6 or 7 per cent. allowed upon United States notes, *which does not happen to be the case*. The present issues of United States legal tender notes are a saving to the Government in interest, and at the same time affords all engaged in business a safe and convenient currency throughout the country; and the present system as a temporary measure with a view to the end originally conceived by the Secretary of the Treasury, is so happily constituted, that an opportunity is given all citizens when desirous of withdrawing from active business, or in having surplus means to dispose of, to fund them in Government bonds at 6 and 7 per cent. interest. Certainly, a happy accommodation and a wise conception.

The scheme proposed by the memorialists is readily seen through; for if it would bring gold into more active circulation, it could only be done at the expense of the Government. The vast wealth and resources of the United States, and the taxes, both for impost and excise duties, now in process of collection, are estimated as being far in advance of the amount required for our present and prospective national indebtedness, and a healthy reduction of the national debt.

What better security, therefore, can be offered than the issues or bonds of the United States?

Any well informed mind, accustomed to closely observe the mutations of financial panics, and the disposition to hoard gold, well knows that they spring from artificial means, and that there is no foundation, beyond an artificial one, for gold to rule at its present quotations.

Should Government, therefore, pay no heed to *memorials* from the moneyed center, gold would soon be found to fall to its legal and just standard, and be on a par with United States notes, for, admitting there be no doubt of the suppression of the rebellion, which, from its moral and material certainty, scarcely need be named. Witness, for instance, the first issue of United States Demand Notes; simply because they are available for duties, they rule nearly equal to gold; and certainly, as stated, the resources of the United States, and the taxation so freely submitted to in perpetuating the liberties and interests of the people, will make the issue of the United States Legal Tender Notes quite the same in value.

But the broad principle which I shall now attempt to briefly unfold as the true cause of our national and financial difficulties, and which, while the Government system remains the same—their interest being apart from the direct participation of the people—will always create discontentment from different sections and moneyed centers—as the financial system is at present in part constituted, and which the memorial alluded to proposes to overthrow, the Government will always be looked upon as a *bird to pluck* by present and remote competitors, and necessarily, the greatest moneyed center must thereby control the financial disposition of the Government—and these create jealousies and divisions, which have done

more to weaken the bonds of this Union than all other minor interests combined.

Great and unbounded credit has been awarded to William Pitt, the English statesman, by the civilized world, as a sagacious and profound financier during the extension of the national debt of Great Britain, at the period of the Continental wars, and his having conducted the finances of the nation with such signal ability, that the debt, in a great measure, has been the immediate cause of her vast strides toward unbounded wealth and gigantic power.

Let us look into, and see how comparatively easy a nation situated as Great Britain was, and is at this period, for her Chancellor of the Exchequer to carry the nation through with such vast and happy results.

The National Debt of Great Britain, at the period named, was principally owing to her capitalists and wealthy men, and hence had to be simply extended, which, for the preservation of their own interests, gladly acceded to the wishes of their Government, and thereby the safety and perpetuity of their wealth was not imperiled.

Certainly a comparatively easy matter, as stated, although it can not be doubted that Wm. Pitt was one of the greatest statesmen the world ever knew. Were it possible, however, for him to revisit this earth and be placed at the head of our National finances he would find a far different state of things to reconcile with a financial system not under the control of Government.

The only system for Congress to adopt, and which will harmonize all interests—for we have the wealth, and only wish to make an equitable distribution of the same by the Government—will be to immediately retire all bank issues throughout the country, either by taxing them with the view to their gradual withdrawal or to imperatively insist on their cancellation.

After which, the plan recommended by the present Secretary of the Treasury is the only feasible and proper one to harmonize all conflicting interests, and thus, by a financial bond, above all others the most controlling, secure the unity, power, and happiness of the people of the United States.

Much has been written and said upon the suggestion which Mr. Chase recommended to Congress, in connection with a national system of finance, and all opposition it is clearly apparent, for the reasons above set forth, have been and will be continually made.

If Congress can only rise and soar above all localized jealousies, and establish a system which has been recommended, in a national point of view, the Government and the people of the United States will hereafter have occasion to rejoice, and posterity will laud with anthems of praise the happy hour when the bonds of their perpetual liberties were established.

It is easily to be seen that had such a national system of finance been established, as proposed to the last session of Congress, no rebellion could have ever taken place; for all minor matters would have sunk into insignificance when the pecuniary interests of a people were likely to be disturbed, as nations, alike with individuals, notwithstanding the degree of moral advancement attained, are continually controlled by the prospects—present and remote—of pecuniary advantage.

OBSERVER.

While we do not fully endorse the conclusions arrived at by Observer, it can not be denied that the motives of the New York memorialists were those of interest rather than of

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	64	48	\$	\$	\$	\$	\$	Sept. 30, 1860	Maryland Sterling	3,000,000	5			
Baltimore and Ohio.....	Md.	64	3-0	13,111,800	10,781,833	566,07	3,922,203	2,305,788		Mortgage.....	2,500,000	6	95	1885	
do do										"	700,000	6	84	1880	
do do										"	1,128,500	6	90	1875	
do do										"	1,000,000	6		1867	
do Washington Branch.....	Md.	30		1,650,000						1st Mortgage.....	791,000	7	55	1866	
Bellefontaine and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	2d ".....	160,000	7		1870	
do do															
Buffalo and State Line.....	N.Y. & Pa.	60	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	138	75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	96		3,798,400	8,860,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	470,000	6	100	1864	
Central Ohio.....	Ohio	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st ".....	600,000	7	62	1861	
do do										2d ".....	800,000	7	64	1865	
do do										3d " S. F.	950,000	7		1865	
do do										4th " S. F.	1,365,000	7		1865	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d ".....	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	235,787	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7			
do do										2d ".....	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						3d ".....	1,000,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	2d ".....	500,000				
do do										Pref 1st Mor. & S. F.	1,250,000	7	101	Feb. & Aug. 1	
do do										Gen'l 1st Mortgage.	3,600,000	7	77	Feb. & Aug. 1	
Chicago and Rock Island.....	Ills.	78	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	2d ".....	2,000,000	6	31	May 1.	
Chicago, Burlington and Quincy.....	"	88	138	4,689,340	4,814,515		1,514,428	761,830		1st Mortgage.....	2,000,000	7	105	1870	
do do										Cons. 1st Mort. S. F.	2,172,000	8	110	1873	
do do										2d " S. F.	813,000	8	108	1890	
do do										1st Mor. Chi. & Aur.	390,000	7		1867	
do do										2d ".....	303,000	7		1869	
do do										1st "Cent. Mil. Tract	302,000	7		1874	
do do										2d ".....	245,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
Cincinnati, Hamilton and Dayton.....	Ohio.	105	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d ".....	950,000	7	100	1880	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d ".....	532,000				
do do										3d ".....	104,000				
Cleveland and Mahoning ..	Ohio.	68		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,509	7	80		
do do										1st Mortgage.....	850,000				
do do										2d ".....	499,000	7			
do do										3d ".....	341,000	7			
Cleveland and Pittsburgh.....	Ohio & Pa.	40	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1880	
do do										2d " M. L. or 1st Ex.	1,188,000	7	93	1873	
do do										3d 2d Ex.....	1,165,000	7	81	1865	
do do										4th 3d Ex.....	1,154,000	7	75		
Cleveland and Toledo.....	Ohio.	66	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	359,000	7	103	1867	
do do										1st " " 2d Div.	263,000	7		1872	
do do										2d ".....	265,000	7		1862	
do do										1st " Tol. Nor. & Clev	521,000	7		1863	
do do										2d ".....	293,300	7		1864	
do do										Junction Income..	44,500	7		1862	
do do										C. & T. Income..	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	136	135	4,746,100	519,000	4,201	1,255,003	664,889	Dec. 31, 1861.	1st Mortgage.....	519,000			1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	135	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	664,000	7	106	1861	
do do										2d ".....	303,000	7		1862	
Columbus and Xenia.....	Ohio.	115	54	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700	7	100	1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666						2d ".....	2,212,000	7			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	50		
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000	7	90	1875	
do do										2d ".....	1,000,000	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		986,061	1,219,100	249,868	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.											
do do										1st Mortgage.....	400,000				
Galena and Chicago Union.....	Ills.	80	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	2d ".....	180,000				
do do										1st Mortgage.....	1,993,000		104	1862 & 1863	
Great Western	Ills.	175		1,000,000	2,391,000		455,943	181,529	May 31, 1861.	2d ".....	1,520,000	7	100	May 1, 1875	
do do										1st Mortgage W. D.	1,041,000	10			
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report					1st " E. D.	1,350,000	7			
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573							
Hannibal and St. Joseph.....	Mo.	206		1,041,086	10,554,000	220,336	996,907	512,933	Sept. 1, 1860.	Land Mortgage...	5,000,000				
do do										Mortgage Conv.....	1,354,000				
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	927,000	6	30	1873	
Hudson River.....	N. Y.	72	144	3,758,466	9,107,000	162,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	115	1869 & 1870	
do do										2d S. F.	2,000,000	7	105	1870	
do do										3d ".....	1,840,000	7	101	1875	
Illinois Central.....	Ills.	76	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	28,000	7	107	1868	
do do										Construction.....	12,885,000	7	100	1875	
do do										".....	4,115,000	6	97	1875	
do do										Debentures.....	42,740				
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000	7			
do do										2d ".....	578,000	10			
do do										Income.....	38,700	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000	7		1866	
do do										2d ".....	400,000	7	90		
do do										Real Estate Mort..	200,000	7	90		
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	1st Mortgage.....	649,984	7			
do do										2d ".....	314,000				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report								
Iowa.....	Ohio.	13		118,865	50,000		No report								

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quantity of Stock	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.		86½	\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000	7		
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st	249,000	7	75	1861
do										2d	392,000	7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.		99	Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st	260,000	7		
do										2d " Conv.	1,000,000	7		
do										3d	600,000	7		
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiver.						1st Mortgage E. D.	903,000		89	
do										2d " E. D.	1,000,000			
do										1st Land Grant W D	4,000,000		21	
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report			1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.		29	514,433	130,000		108,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1883
Little Miami.....	Ohio.	115	65				1,330,030	529,981	Jan. 1, 1862	City Loan.....	174,000			
Louisville and Frankfort.....	Ky.		65	1,169,59	394,519		245,910	98,679	June 30, 1861	1st Mortgage.....	248,000			
do										1st Mortgage.....	2,400,000	7		
Louisville and Nashville.....	Ky.		268	5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000			
do										1st " Memphis Br.	500,000			
Louisville, New Albany and Chicago..	Ind.		288	2,800,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.		87	1,648,050	1,285,300	87,969	230,563	99,020	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861
Marietta and Cincinnati.....	Ohio.		203	8,561,213	190,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868
do										2d	2,000,000	7		
do										3d	1,500,000	7		
do										Sterling Income...	333,000	4		
do										Domestic	928,617			
Michigan Central.....	Mich.	88½	284	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	1st Mortgage Sterl	467,483	6	98½	1872
do										1st " Conv.	500,000	8	84	1869
do										1st " unconv.	250,000	8	96	1860
do										1st " Dollar Conv.	2,584,000	8	106	1869
do										1st " S. F. Conv.	4,153,000	8	112½	1862
do										Mort. Mich. So....	991,000	108		1860
do										" Nor. Ind.....	985,000	103		1861
do										" Goshen Line.....	1,168,400	100		1862
do										S. F. Toledo.....	2,850,000	103½		1865
do										2d Mortgage.....	2,465,000	8	93½	1877
do										1st Mortgage.....	400,000	8		
do										2d	20,000	7		
do										1st Mortgage.....	420,000	8		
do										2d	600,000	8		
do										1st Mortgage.....	2,550,000	7	104	1891
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182						
do														
Milwaukee and Horicon.....	Wis.		42	1,101,200										
do														
Milwaukee and Prairie du Chien.....	Wis.	34	192	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,550,000	7		
Milwaukee and Western.....	Wis.		71	No report										
Mississippi and Missouri.....	Iowa.		55	No report						1st Mortgage Conv.	1,000,000	7	96	
do										2d " S. F.	400,000	8		
do										Oskaloosa Div.....	1,425,000	7		
do										Land Grant.....	7,000,000	7		
New Jersey.....	N. J.	34		4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000		109	
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.					
New York and Erie Pref.....	N. Y.	90½		Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860	1st Mortgage.....	3,000,000	106		
do		60								2d	4,000,000	110		
do										3d	6,000,000	107		
do										4th	4,900,000	100		
do										5th	1,792,500	100		
New York and Harlem Pref.....	Conn.	50	138	5,717,190	6,035,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,550,000	7	109½	1873
do										2d	1,000,000	7	105	1864
New York and New Haven.....	Conn.		21	3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	7	94	Dec. 1, 1866
do														Oct. 1, 1875
New York Central.....	N. Y.	101½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,925,000	6	109	May 1, 1863
Northern Central.....	Md.		138	2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Mortgage.....	3,000,000	6	103	June 15, 1864
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	Construction.....	2,486,500	6		1885
Ohio and Mississippi, Eastern Div....	Ohio & Ind		192	Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	State Loan.....	4,350,000	6		
do										1st Mortgage.....	2,193,500	6		
do										3d	316,995			
do										Construction.....	4,637,920			
do										Income.....	3,591,185			
Ohio and Mississippi, Western Div....	Ills.		148		3,292,403		No report			State Loan.....	7,000,000	6		
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W.....	2,800,000	6		
do										Construction.....	4,500,000	6		
Pennsylvania.....	Pa.		359	13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,900,000	6	104½	1888
do										2d	3,319,000	6	98½	1875
do										2d " Sterling.	1,957,440	6		1875
do										State Works.....	7,200,000	5	89	
Peru and Indianapolis.....	Ind.		74	1,100,000	820,000	80,000	No report			1st Mortgage.....	2,300,000	6	90½	1894
Philadelphia, Wtl. and Baltimore....	Del.		98	6,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863
do										1st Mort. O. & P..	1,000,000	7	105½	1865
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	43	467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	2d "	750,000	7	90	1866
do										1st " O. & I....	1,000,000	7		1872
do										2d	280,000	7		1873
Pittsburgh and Connellsville.....	Pa.		49	1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000			
Racine and Mississippi.....	Wis.		104	2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.					
do														
Sandusky, Dayton and Cincinnati..	Ohio.		170	2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1866
do										"	997,000	7		1866
do										"	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.		125	848,770	1,385,200	132,063	185,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1866
do														
Springfield, Mt. Vernon & Pittsburgh..	Ohio.		56	402,975	500,000	100,000	110,200	53,100		1st Mortgage.....	500,000			
do			50	1,000,000	1,050,000	200,000				2d	450,000			
Staubenville and Indiana..	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d	900,000	7		1865
Terre Haute, Alton and St. Louis....	Ills.		208	No report						1st Mortgage Conv.	1,000,000	7	98	1862
do										2d " Conv.	2,000,000	7	78	1868 & 1876
do										1st " Bel. & Ill.	517,000	7		1873
Terre Haute and Richmond.....	Ind.	105	73	1,381,450	230,000	No report	377,092	216,133	Dec. 1, 1861.	1st Mortgage.....	240,000	7	106	1866
Toledo, Wabash and Western.....	Ohio & Ind	35	243	2,123,506	5,996,049	52,389	233,546			1st Mortgage.....	3,400,000	7	94½	Aug. 1, 1865
do										2d	2,500,000	7	80½	Nov. 1, 1878
do		78								Mort. Coupons.....	90,040	7		1860 to 1865

patriotism. Money is rarely patriotic, but always vigilant for its own gains. And whether its object in this instance be to throw the expense of circulating coin on the government, or to substitute legal tender bonds for the specie reserve of the New York Banks, and thus make the enormous idle capital which they are compelled to keep in their vaults productive to the extent of four and a half per cent, the motive will be the same. Interest, not patriotism, will be found to underlie the memorial.

Observer is undoubtedly mistaken as to his assertion that this rebellion could have been averted—it was deliberately undertaken, after full consideration of its cost, and years of preparation. The leaders of the Rebellion had an object in view, compared with which the currency of the country was a bubble. Their visions of the glories of a Southern Empire would have overshadowed the rays of a national currency as easily as they obscured the groans of those wounded and the ghastly heads on their battle-fields.

PHILADELPHIA, GERMANTOWN & NORRISTOWN RAILROAD.

The annual report of this company just published, gives a statement of its affairs for the fiscal year ending September 30, 1862. The road is a short one, its whole length being only 17 miles, from Philadelphia to Norristown, with a branch road of three miles, making in all twenty miles of double track. From the report it will be seen that the earnings for the year have been over \$12,000 per mile of road. The report says:

The total amount of ordinary receipts for the year just closed is \$255,807 95.

A comparison with last annual report will show that the receipts have been increased \$7,332 42; said increase being confined to freight and toll on coal.

The Chestnut Hill Branch shows an increase of \$759 86.

At the last session of the Legislature, the citizens of Roxborough procured an Act of Incorporation, authorizing them to construct a railroad from the line of our road, at or near the Wissahickon station, through Roxborough and Plymouth. A partial survey of the route has been made, and a considerable amount of stock subscribed, but not sufficient, we understand, to warrant its commencement. It will probably be constructed during the coming season, as the enhancement of real estate along the line of the road would more than repay its construction. When finished, a considerable revenue may be expected, as but few places adjacent to the city offer so many facilities for building purposes. The natural advantages of position along the proposed route are unsurpassed. A beautiful country and scenery, comprising good land at low rates when compared with that of other places, situated at a similar distance from the city are among the inducements offered to those of rural taste and enterprise.

One million six hundred and twenty-six thousand eight hundred and one (1,626,301) passengers have been carried over the road during the past year, with entire and perfect safety. More than eighteen thousand trains since the last report have passed over the road, without the slightest accident having occurred

to passengers or even persons crossing over or walking on the road, affording the most conclusive evidence of the precaution taken by the company to avoid accident, and also of the care exercised and management of the employees. In review of this statement, it may be truthfully asserted that such freedom from accident is not only unusual, but of rare occurrence.

Three years have elapsed since the introduction of coal in our engines, instead of wood; and from the statement it will be seen that the expense has been reduced more than one-half. The economy of substituting coal for wood is no longer a matter of doubt. That it somewhat increases the expense of repairs to the engines is true; but the increased expense is so small, when compared with the amount gained in the item of fuel, that the advantages of using coal are readily perceptible.

The ticket system, adopted two years ago last February, has fully satisfied all expectations. Its general introduction is but a matter of time. By this method accounts need no adjustment—indeed, the accounts of the several agents scarcely require examination, so perfect is it in its operation.

The actual expenses attending the running of the road, irrespective of ground-rent, taxes, etc., were \$11,951 96, which, being divided by 229,938 (the number of miles run by the engines,) gives 48 cts. per mile run—showing as much economy in working the road as can be reasonably expected. The whole expense, including ground-rents, taxes, and likewise including the new trestle-work over the Wissahickon creek (about \$4,000), amounts to \$128,077 75, which being divided as before, gives as the result 55½ cents per mile run, comparing, as it does, very favorably with preceding years.

From the ordinary income of the past year, after deducting all necessary and incidental expenses, and making the usual appropriations to the Sinking Fund, interest on loans, taxes, etc., two dividends of three per cent. each were declared—one in April and the other in October, leaving a handsome surplus.

On the afternoon of the 12th of August last, the bridge over the Wissahickon creek was entirely destroyed by fire. The bridge took fire from the mill adjacent, known as Robeson's Mill. An arrangement was immediately made with Mr. Stone for the erection of a trestle-work as a temporary bridge. The whole work was satisfactorily completed in thirteen days; and in nineteen days the trains were regularly passing over the bridge. During the interval, the Reading Railroad Company generously tendered the use of their road for the transportation of freight and passengers. The Company availed themselves of their kind offer for the transportation of freight; but the passenger operations were conducted on our own road, by a little inconvenience to the passengers—that of walking from one side of the bridge to the other. Proposals having been invited for the construction of an iron bridge, the same were received up to the 1st of October. The bids were few and exceedingly high—owing to the increased price of iron and the present difficulty of procuring it. Under existing circumstances, the Board reconsidered the resolution authorizing the construction of a wrought iron bridge, and, instead, passed a resolution authorizing the erection of a substantial wooden one. The plan for the same has been adopted and the materials purchased, and it is expected that, by the first of the coming year, a permanent bridge will have been built and completed. It may incidentally be remarked that the insurance on the old bridge was more than sufficient to pay the expense of erecting the temporary trestle-work alluded to.

The recent act of Congress, imposing a general taxation by the National Government, has made it necessary for the railroad companies to increase the rates of fare. It was the design

of the company to increase the rates just enough to cover the tax if possible, and we believe the arrangement recently made will be found to effect such a result. The rates of passenger fare to Norristown and Conshohocken remain unchanged, but those to Germantown and Manayunk have been augmented two cents, and to Chestnut Hill three cents, thereby averaging all the rates on our road uniformly at two cts. per mile.

The Company some years since issued bonds to the amount of \$370,000, and at the same time they were indebted for real estate nearly \$70,000, making a total indebtedness of \$440,000. The bonds being about to become due, it was thought expedient to have a law enacted to allow the Company to execute a new mortgage and reissue the bonds. Accordingly an act was obtained from the Legislature last winter, authorizing them to execute a mortgage for \$450,000 on the franchises of the Company, and issue this amount in lieu of the old ones to be taken up. The new loan is convertible into stock for a certain number of years at the option of the holder. Already \$199,800 of the old bonds have been returned and new issued. Bonds to the amount of \$35,700 have been sold for cash, and all mortgages and ground-rents therewith paid, leaving, after deducting the amount in the Sinking Fund, \$120,500 yet to be converted or paid when due, and new issued. The balance not required may at any future time be sold, should it be deemed necessary.

DECISION—LIABILITY OF RAILROAD COMPANIES FOR ACCIDENTS IN THEIR STAGE LINES.

Judge Hogeboom has recently decided in the Supreme Court, that a railway company is liable for damages received in a stage connected with the railway as a part of its line.

The action was brought by one Buffit against the Troy and Boston Railroad Company, to recover damages for injuries received by him by the overturning of a stage sleigh employed by that company for the purpose of conveying passengers to and fro between the village of Schaghticoke Point, and the Schaghticoke station on the defendant's railroad, distant about a mile from the village, and was brought to trial at the Rensselaer Circuit of the New York Supreme Court, in May, 1860.

It appeared that the railroad passes about a mile from the village of Schaghticoke Point, at what is called Schaghticoke station. Passengers on the defendant's railroad, going to and from the village of Schaghticoke Point, had, ever since the opening of the road, been conveyed in omnibuses, stage wagons or sleighs, which, in going to the trains, ordinarily started from the upper end of the village and passed down through the main street, stopping along for passengers. The conveyances used for this purpose were furnished by one John Downs, who was, together with his conveyances, horses and servants, hired by the defendant at a daily compensation to carry passengers between the village and the station and said Downs was in the defendant's employ for that purpose at the time of the occurrence out of which this action arose. The plaintiff took passage at the lower end of the village of Schaghticoke Point, on the stage sleigh then driven by one of Downs' men, for the purpose of coming to Troy by the defendant's railroad. As the sleigh stopped the driver told the plaintiff that it was full inside, and he then got on the outside. The defendant had no ticket office at the village of Schaghticoke Point, but Downs sold tickets.

Passengers generally purchased their tickets of Downs after reaching the depot, but sometimes at the village. The plaintiff had not purchased one on this occasion. Between the village and the depot the sleigh was overturned, and the plaintiff received the injuries for which the action was brought.

The jury rendered a verdict in favor of the plaintiff for \$450 damages, and the defendant then appealed to the general term of the Supreme Court which now affirmed the judgment of the court below, and held the contract made by the defendant with Downs to be a lawful one, and that the company was liable in damages for the plaintiff's injuries. The following is a part of the opinion rendered by the court at the decision of the case:

HOGENOOM, J.—Two questions are made in this case. First, was the plaintiff a passenger with the defendant, and, second, was the contract for carrying by stage a lawful one.

As to the first question, the proof was sufficient to go to the jury, and it was submitted to them with instructions that the plaintiff held the affirmative. The stage was run in connection with the railroad, and so far as it appears, for no other purpose. The presumption is, that the plaintiff entered the stage intending to take passage by rail. The proof was express that such was his intent. These facts made a legitimate case for the jury, and the question being fairly submitted to them, their verdict on this point should not be disturbed.

Second, was the business of the defendant in running the stage in connection with its railroad, *unlawful*, and the contract to convey the plaintiff by stage *ultra vires*.

It must be conceded that the right to run a stage was not one of the *express* powers granted by the charter; nor perhaps an *implied* power *indispensably* necessary to carry into effect the *express* powers. But it was nevertheless a power convenient and proper for the successful transaction of the business of the defendant promotive of the objects of the corporation, and conducive, at least not injurious—to the interests of the public. It appears to have been exercised in strict subordination to the principal objects of the incorporation, to wit, the transportation of passengers and freight by rail, with safety, convenience and dispatch. It was not made an independent business carried on for the purpose of speculation, nor with a view to compete with rival conveyances from the village by stage, but strictly incidental to railroad operations, and confined to the immediate neighborhood of the depot. In itself the business was not unlawful nor a prohibited one; nor was it to the limited extent it was carried on, against public policy. Under these circumstances can it be said to be unlawful, or beyond the just powers of the corporation, fairly and reasonably constructed? If so, then any conveyance of passengers by stage between the termini of different railroads in a city, or between disconnected portions of the same railroad, disconnected by accident or design, permanently or temporarily, is illegal if carried on by the railroad company. And any conveyance of passengers by the railroad, if it happens to traverse in any portion of its route, and not expressly dedicated to the railroad company, or the title to which has not been legally acquired, is also illegal. I am inclined to think that as the business, irrespective of the charter was lawful in itself, plainly promotive of the objects of the incorporation, not pushed beyond a needed accommodation to the immediate neighborhood, and

not violative of any principle of public policy, the business was lawful.

It seems also to be settled by judicial decisions, at least so far as this court is concerned, that such a contract is lawful, and that the defendant is estopped to deny its validity. (*The judge here comments upon the following cases: Hart vs. the Rensselaer and Saratoga R. R. Company, Cary vs. Cleveland and Toledo R. R. Company, Bissell vs. The Michigan Southern and Northern Indiana R. R. Company, and Parish vs. Wheeler.*) The contracts in all of these cases seem to me to be as much *ultra vires* (if so at all) as in the case at bar. They had strictly no power to contract for railroad operations, or railroad liability, beyond the bounds of their respective routes and States. It is true their business was in its nature a legitimate railroad business. But I have endeavored to show in a previous part of this opinion, that the business pursued by the defendant on this occasion was a legitimate railroad business—not done exclusively on its railroad, to be sure—but connected with it and appurtenant to it—incidental entirely to railroad transportation—done to advance that interest by concentrating travel and freight at the railroad station by other means and appliances, within a narrow circle of territory in the immediate neighborhood, and not designed to set up an independent and substantive business, competing with other interests, disconnected with and dissimilar to the legitimate railroad operations for which it was chartered.

But suppose the contract and business in question to be unlawful, in the sense that it exceeded the powers granted by its charter, is the defendant released from liability? On this subject several considerations seem to me to be worthy of notice, and to possess considerable force.

First; the defendant had long been engaged in this stage of business—indeed, ever since it had existed as a corporation. This appears from the evidence. It must be presumed to have been known to the stockholders, who never in any way arrested it. Second; it must also be presumed, from the absence of evidence to the contrary, that the stockholders participated in the benefits of this arrangement, and thus approved and adopted the unauthorized acts of their directors and managers. In this particular instance they did the same thing as taking the money of the plaintiff and agreeing to transport him safely to Troy.

I incline to think—under the authorities before quoted and the general principles of law—that it is estopped from denying its liability for the acts of its agents, as much as a party would be who, knowing that a note was infected with usury, and therefore void, nevertheless represents it as valid business paper, on the faith of which representation it is taken. At all events receiving the plaintiff into its stage with its consent, it was under a duty to transport him with ordinary care, and it is responsible for a neglect of that duty.

This latter point was not presented at the trial, nor ruled by the Court, and there is some doubt, perhaps, whether it ought to be employed here to prevent a new trial, although I do not see why, if well taken, it will not be fatal to the defendant's case, if the weight of evidence on the question of negligence be conceded to be with the plaintiff. The essence of the charge was, that the defendant was liable for negligence in the conveyance of the plaintiff. I am prepared, however, if necessary to rest the affirmation of the judgment upon the grounds taken by the judge at the trial. Judgment affirmed.

MONETARY & COMMERCIAL.

The week that has passed has been one of unusual interest in monied circles. The discussion of the great topics suggested in the Annual Message of the President and Reports of the Secretaries has engaged general attention. It is very evident that if we are to subdue the rebellion, it must be done by great sacrifices of life and treasure. And that our success depends upon absolute unanimity. It is conceded that our armies are brave, superior in physique and courage to those of our opponents, but the humiliating concession is also made that our leaders have been divided, and have allowed petty jealousies to keep this brave and noble army in worse than inactivity, wasted by disease and worn out by useless fatigues. The confession of these flagrant outrages is humiliating in the extreme, but still the facts are admitted. With the experience of the past before us, it is not to be wondered at that the acts of the new Commander of the Army of the Potomac should be viewed with the strictest criticism. It must be confessed that he has yet done nothing to justify the high expectations of him. The fine weather of the Fall and early winter is rapidly passing by. We can count on only a few weeks of available campaigning, and what is done must be done quickly.

Notwithstanding the fluctuations of the week, money remains abundant at low rates. First class paper is readily negotiated at 8 to 10 per cent. Indeed, much difficulty is experienced in making satisfactory investments at these rates. Other grades, although more readily disposed of than previously, are still difficult of negotiation. Exchange remains at former quotations, perhaps a shade firmer, but so little changed as to be difficult to define. The quotations are:

	Buying.	Selling.
New York.....	1/2 @ 1/2 dis.	par
Philadelphia.....	1/2 @ 1/2 dis.	par
Boston.....	1/2 @ 1/2 dis.	par
Baltimore.....	1/2 @ 1/2 dis.	par
Gold.....	31 prem.	33 to 33 prem.
Silver.....	25 prem.	28 to 34 prem.
Demand Notes.....	25 prem.	....

General business continues very good. We notice great activity in all branches, and a general tendency to increased prices. Many articles, especially those imported, have largely increased in value.

The weather during the week has been favorable to pork packing. Prices have ranged from \$4.10 to \$4.50, according to the supply in the market and the quality of the hogs. The *Price Current* puts up the receipts of the season as compared with previous years, as follows:

By railway.....	44,358
By river.....	1,892
From Kentucky.....	19,790
Driven in.....	2,600
Slaughtered at Plainville and Newtown.....	5,700
Total for the week.....	74,240
Previously reported.....	230,867
Total this season.....	304,915

Same time last season	152,686
" in 1860	189,519
" 1859	240,678
" 1858	278,592
" 1857	162,938
" 1856	250,213
" 1855	235,062
" 1854	235,259
" 1853	233,409
" 1852	206,154
" 1851	212,748
" 1850	223,265

The market for the hog product has been moderately active. Old mess pork has been held at \$11, and new, which has been packed to some extent, at \$12.50 to \$13, but there have been no sales of importance.

We notice a fluctuating market for securities at the East. European exchange and gold also fluctuating during the week. The public mind is in a state of feverish anxiety, and only some brilliant success to our arms will give the steadiness and confidence that are needed.

GRAND TRUNK RAILWAY.—On and after Monday, 8th December, trains will leave Detroit as follows:

GOING EAST.	
Buffalo Express leaves at.....	6 50 A. M.
Night Express "	5 20 P. M.
Mixed Train "	2 15 P. M.
ARRIVAL OF TRAINS.	
Buffalo Express arrives at.....	6 00 P. M.
Night Express "	8 40 P. M.
Mixed Train "	12 25 P. M.

HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

Carriage, Tire, Machine, Plow, & all kinds of

SCREW BOLTS,

Nos. 535 & 537 Central Avenue.
CINCINNATI.

BRIDGE BOLTS, Rivets of all sizes, Coach Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov. 27, 1y

Philadelphia, Wilm'gton & Baltimore
RAILROAD!



FOUR PASSENGER TRAINS DAILY!

RAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.20, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11. P. M., Express.
On Sundays at 3.30, A. M., and 11. P. M.
Leave Baltimore for the North and West daily, at 8.30, A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail; and 7.00 P. M., Express.
On Sundays at 7. P. M., only.
Through connections made for all points at the North, East and West.

WM. CRAWFORD, Agent.

J. T. CRAPSEY,

ATTORNEY AT LAW,

—OFFICE—

N. W. Cor. Walnut & Sixth Street,
CINCINNATI

KNIGHT BROS. Consulting Engineers, —AND— COUNSELLORS IN PATENT CAUSES,

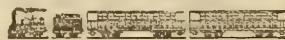
Solicitors of American and Foreign Patents.

Sprague's Bld'g.

OPP. POST OFFICE,

CINCINNATI, O.

CHICAGO, GREAT WESTERN AND
NORTH-WESTERN LINE—INDIANA
POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS.

CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—6:00 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—11:30 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—6:30 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the **RIGHT TICKET OFFICE** before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route. Baggage checked through.

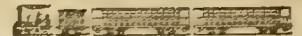
Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President,
W. H. L. NOBLE,
General Ticket Agent.

O. E. COTTON, Cincinnati agent.

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

Through Distance 280 Miles;

42 Miles Shorter than any other Route.

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot at 7:30 A. M. 7:00 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House; and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without rebilling or transshipment.

JOHN BRANT, JR., Superintendent

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent.

33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON,
STOCK BROKER,
No. 21 West Third Street,
CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and takes collections.

KNOX & SHAIN,
Engineering and Telegraphic
INSTRUMENT MAKERS,
218 WALNUT ST., PHILADELPHIA.
(Two Premiums 4 19 1 by Franklin Institute.)

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet Walnut & Vine
CINCINNATI O

BUSH & LOBDELL,
Chilled Railroad Car Wheel, Tyre,

—AND—
Railroad Machine Works,
Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,

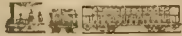
With or without Axles.

WHEELS FITTED

To Hammered or Rolled A

In the best Manner, at the Shortest Notice,
Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition.

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT

Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Baltimore, O.
T. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

**NEW YORK, BOSTON,
AND ALL EASTERN CITIES,**

CARRYING THE

Gr. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Geo G. CHARLES MINOT, Gen'l Sup't

W. MORRILL. G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men the West that all work furnished by us shall be of the highest quality, workmanship and material. We respectfully solicit, with the assurance that it will be promptly and to the entire satisfaction of

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!

THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH to PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,

**THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.**

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (430 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.

BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freight of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburg with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
D. A. STEWART, Freight Agent, Pittsburg.

CLARKE & CO., Transfer Agents, Pittsburgh.
R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.
W. W. AIKMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.
CLARKE & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.
G. B. NEAL, Parkersburg, Virginia.

HALL & CO., Marietta, Ohio.
H. S. PIERCE & CO., Zanesville, Ohio.

McDOWELL & McCORM, Portsmouth, Ohio.
R. McNEELY, Maysville, Ky.

J. P. JOHNSTON, Ripley, Ohio.
JOHN TODD, Covington, Ky.

G. L. HEATON, Cleveland, Ohio.
R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Allentown, Pa.
L. L. HOUST, Gen'l Ticket Agent, Philadelphia.
H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	6:30 A. M.	9:20 P. M.
Mail and Express.....	8:30 A. M.	6:20 P. M.
Columbus Accommodation.....	4:00 P. M.	11:05 A. M.
Morrow Accommodation.....	6:00 P. M.	8:00 A. M.

Cincinnati Hamilton and Dayton. RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	6:30 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	6:30 A. M.	11:40 P. M.
Cin. & Chicago Air-Line Ex.....	8:00 A. M.	8:50 P. M.
Dayton and Richmond.....	3:15 P. M.	1:30 P. M.
Day, Toledo & Detroit Huntville.....	5:20 P. M.	10:55 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	8:15 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:55
Eastern Night Express.....	10:00 P. M.	6:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	5:00 A. M.	12:20 P. M.
Indianapolis and Terre Haute.....	5:00 A. M.	12:20 P. M.
Decatur, Springfield & Quincy.....	13:45 A. M.	4:45 P. M.
Chicago Night Express.....	5:00 P. M.	10:40 A. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	6:00 A. M.	10:50 P. M.
Seymour Accommodation.....	2:00 P. M.	1:15 A. M.
Louisville and St. Louis Night Ex.....	7:10 P. M.	7:20 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots.

SLEEPING CARS ON ALL NIGHT TRAINS.

Omni-buses call for passengers as usual.

P. W. STRADER,
General Ticket Agent L. M. & C. & X., and C. H. & D Railroads.

W. H. L. NOBLE,
General Ticket Agent Indianapolis & Cincinnati Railroad.

E. F. FULLER,
General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT REE

NEW YORK

ALBERT BRIDGES.

JOSE

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.
Tube CLEANERS, Steel Wire and Whalebone BRUSH-

Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enamelled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warm-
ing Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Pia-
za Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.
Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,
28 Platt Street, New York

N. W. BALDWIN, MACHEW BAIRD.

M. W. BALDWIN & CO. ENGINEER'S

BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those
interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for
which they may be required, by the use of one, two, three or
four pair of driving wheels; and the use of the whole, or
so much of the weight as may be desirable for adhesion;
and in accommodating them to the grades, curves, strength
of superstructure, and rail work to be done. By these
means the maximum useful effect of the power is secured
with the least expense for attendance, cost of fuel, and re-
pairs to Road and Engine.

With these objects in view, and as the result of twenty-
six years' practical experience in the business by our senior
partner, we manufacture five different kinds of Engines,
and several classes or sizes of each kind. Particular atten-
tion paid to the strength of the machine in the plan and
workmanship of the details. Our long experience and
opportunities of obtaining information enables us to offer
these engines with the assurance that in efficiency, econo-
my and durability, they will compare favorably with those
of any other kind in use. We also furnish to order Wheels
Axles, Bowling or Low Moor Tire (to fit centers without bo-
ring), Composition Castings for Bearings; every description
of Copper, Sheet Iron and Boiler Work; and every article
pertaining to the repair or renewal of Locomotive En-
gines.

CONTRACTS for Rails at a fixed price, or on com-
mission, delivered at an English port, or at a por-
t United States, will be made by the undersigned
THEODORE DEBON,
101 10 Wal Broadway, New York

EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



LOCOMOTIVE & RAILROAD
CAR SPRING
MANUFACTURER,
WILMINGTON, : DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with
important improvements, at a reduction on former prices;
and to meet the demand for a GOOD, LOW-PRICED FAMILY
MACHINE, have introduced a *new style*, working upon the
same principle, and making the same stitch, though not so
highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the
Machine, the beauty and strength of stitch, being ALIKE ON
BOTH SIDES, impossible to unravel, and leaving no chain or
ridge on the under side, the economy of thread, and adap-
tability to the thickest or thinnest fabrics, have rendered this
the most successful and popular Family Sewing Machine
now made.

At our various offices we sell at New York prices, and
give instructions, free of charge, to enable purchasers to
sew ordinary seams, hem, fell, quilt, gather, bind, and
tuck, all on the same machine, and warrant it for three
years.

Send or call for a circular, containing all particu-
lars, prices, testimonials, etc.
Feb 12.

WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

-AND-

Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly
on hand, painted, and ready for shipment, with
instructions for applying them. Give us your orders at
No. 66 West Third Street, Cincinnati, Ohio.
Spt. 2.

MOSELEY & CO.

JAMES FOSTER, Jr. & CO.,
MATHEMATICAL AND PHILOSOPHIC-
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S.W. CORNER FIFTH AND RACE,

Cincinnati Ohio.

Drawing Instruments, Scales of all kinds, Barometers,
Thermometers, Spectacles, Microscopes, etc., always on
hand. Repairing attended to.

H. TWITCHELL.

JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co.,
Pennsylvania, are prepared to execute orders for Street and
other Rails on terms favorable to parties wanting to pur-
chase
Aug. 4. m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,
Engine and Car Axles, Pump and Piston Rods
Bar of all Sizes,
And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast char-
coal Pig Iron, refined with Charcoal in the old-fashioned
Forge Fire, hammered into a Bloom from which Iron
hammered. The whole operation from ore to finished Iron
is conducted at our own Works
June 8.

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness
the best and latest improved

COAL OR WOOD BURNING
LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

-AND ALSO TO-

Rebuild and Repair Locomotives.

The above works being located on the New York Central
Railroad, near the center of the State, possess superior
facilities for forwarding their work to any part of the coun-
try, without delay.

JOHN ELLIS, President.
WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boil-
er Flues—from 1½ to 10 inches outside diameter, cu
to definite lengths.

Wrought Iron Welded Tubes—from ½ inch to
8 inches inside diameter, with screw and socket con-
nections, for Steam, Gas Water, or other purposes, and fit-
tings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong
and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—from 4 to 24 inch
diameter, and branches for same, &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER,
THOS. T. TASKER, JR., S. F. M. TASKER,
HY. G. MORRIS.

BUTLER'S

MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Rail-
roaders for the South and West. For sale by 1,000 leading
Merchants and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD }
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, DECEMBER 18, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.
One square, single insertion..... \$1 00
" " per month..... 3 00
" " six months..... 12 00
" " per annum..... 20 00
" column, single insertion..... 5 00
" " per month..... 10 00
" " six months..... 40 00
" " per annum..... 80 00
" page, single insertion..... 15 00
" " per month..... 25 00
" " six months..... 110 00
" " per annum..... 200 00
Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	9.20 P. M.
Mail and Express.....	8.30 A. M.	6.20 P. M.
Columbus Accommodation.....	4.00 P. M.	11.05 A. M.
Morrow Accommodation.....	6.00 P. M.	8.05 A. M.

Cincinnati, Hamilton & Dayton—

Cin. & Chicago Air Line.....	8.00 A. M.	8.50 P. M.
Dayton & Sandusky.....	7.00 A. M.	6.45 P. M.
Dayton & Toledo.....	7.00 A. M.	11.40 P. M.
Richmond & Dayton.....	3.15 P. M.	6.45 P. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.55 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	8.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.50 A. M.
Eastern Night Express.....	10.00 P. M.	7.10 A. M.

Sandusky, Dayton & Cincinnati—

Morning Express.....	7.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.55 A. M.

Marietta & Cincinnati—

Mail.....	9.00 A. M.	5.35 P. M.
Accommodation.....	3.30 P. M.	10.15 A. M.

Ohio & Mississippi—

Mail.....	6.15 A. M.	10.00 P. M.
Express.....	7.00 P. M.	7.20 A. M.

Indianapolis & Cincinnati—

Mail.....	5.00 A. M.	12.20 A. M.
Chicago Express.....	5.00 P. M.	10.40 A. M.

Dayton & Michigan—

Toledo, Detroit & Chicago Exp.....	5.00 A. M.	11.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.55 A. M.

Cincinnati & Chicago Air Line—

Mail and Express.....	8.00 A. M.	8.50 P. M.
Night Express.....	7.00 P. M.	8.15 A. M.

Cincinnati, Wilmington and Zanesville—

Morning Express.....	10.00 A. M.	6.45 P. M.
Accommodation.....	6.00 P. M.	8.05 A. M.

Kentucky Central— (City time.)

First Train.....	6.45 A. M.	10.37 A. M.
Second Train.....	2.10 P. M.	6.30 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

REPORT OF THE SECRETARY OF THE TREASURY.

Our limited space does not admit of our publishing in full the very able report of the Secretary of the Treasury. The document is written with clearness and force, and treats the subjects embraced in it, in a masterly manner. The Secretary opens his report with an allusion to the pressing necessities of the country, and the unprecedented calls upon the resources of the nation, to which the present administration had been required to respond. He says:

"To authorize and prescribe the employment of these means was the peculiar province of Congress; to call forth and direct the armed force which might be authorized, belonged to the President, and, under him to the Departments of War and to the Navy; while to provide the means to meet authorized expenditures in its employment devolved, under the legislation of Congress and the direction of the President, on the Secretary of the Treasury."

He then refers to the fact that all estimates of future expenditures are necessarily uncertain. In the case of the past year, the estimates anticipated a public debt of \$517,372,802 98, on June 30th, 1862, while the actual debt on that day was \$514,211,371 92. If the war continues he estimates the public debt on July 1, 1863, at \$1,122,297,403 24, and on July 1, 1864, at \$1,744,685,586 80. The Secretary has paid especial attention to the subject of reducing the rate of interest on the public debt, and has so far succeeded that the average rate of interest on the whole public debt is reduced to 4 3-5 per cent.

The aggregate receipts of the year, July 1, 1861, to July 1, 1862, from all sources, including balance on hand of \$2,257,065 80, from preceding year, was \$583,885,247 06; and the aggregate expenditure was \$570,841,700 25. Leaving as balance on hand for the commencement of current year, \$13,043,546 81. Of the expenditures, \$96,096,922 09, were expended on account of permanent and temporary debt, leaving a total of current disbursement of \$474,744,778 16.

During the first quarter of the current year there was received from all sources, customs, internal duties, direct tax and sales of land, but not including loans, \$37,208,529 02, or deducting the balance on hand \$24,164,982 21. Mr. Chase estimates the receipts of the remaining three quarters at \$143,286,816 56. Mr. Chase's estimate will be considered quite low enough when it is remembered that in the receipts from the first quarter there is included but one month's returns from the internal duties, and those the returns of the first month of the operation, when its machinery of the law was very imperfect and not fairly started. We have no doubt the Secretary's estimate of receipts from this source is to say

the least a safe one, and perhaps much below what will be realized.

The Secretary estimates the actual aggregate of expenses for the current year at \$788,558,777 62, of which \$511,646,259 96 are already provided, leaving \$276,912,517 66 to be provided by the present session of Congress. For the fiscal year 1864, he estimates that Congress must provide \$622,388,183 56, should the war continue.

Mr. Chase discusses in an able manner the measures adopted to secure the necessary loans for carrying on the war. He estimates that had he required the loans to be paid in specie, the first \$60,000,000 borrowed in gold would have cost \$75,000,000 in bonds, the second, \$90,000,000, and the third, \$120,000,000, rates of discount on the bonds which would have been ruinous to the country. The only course remaining seemed to be, to make the notes of the suspended banks the par standard. The objection to this was that it would stimulate unlimited circulation of bank notes, and unwarrantable expansion. The only safe method in the opinion of the Secretary was that adopted of making National Treasury notes the standard of value, and issuing an amount which could be controlled by Congress.

The Secretary discusses at length the great question of the day, the cause of the increase in the price of gold, and takes issue with the prevalent opinion that it is due to undue expansion of the government circulation. He claims that there is still room for a limited extension of the national currency. If there is any redundancy in circulation he proves by actual returns that it is in the expansion of the circulation of corporate banks. He then spreads out at length his views of providing a uniform circulation for the whole nation by a national currency as at present, and by limiting the issues of banks and securing their circulation, so far as permitted by National Bonds. This he proposes to do by imposing a moderate tax upon corporate circulation, and the gradual substitution of notes redeemable in U. S. notes, in lieu of the present corporate issues, irredeemable during suspension. He recommends that the change should be gradual and not forced and violent.

The Secretary deems it the path of wisdom to look to a gradual return to the specie basis and to this object he recommends the development of the immense mineral resources of our country, so long neglected. As we devote much of our space to the able report of the Secretary of the Interior on this subject, we omit the details given here:

"The act of last session authorized the Secretary to issue bonds of the United States, already often mentioned as five-twenties, to the amount of \$500,000,000, and to dispose of them for coin or United States notes, at the market value thereof. In the same act authority was given to issue \$150,000,000, in United States notes, which authority was

afterwards enlarged to \$250,000,000; and it was provided that any holder of such notes to the amount of \$50, or any multiple of 50, might exchange them for five-twenty bonds at par."

The Secretary recommends the repeal of both these provisions on the ground that they impede the negotiation of large amounts. He believes it will be unnecessary to offer a larger premium for money than is offered by the five-twenty bonds, from the fact that money must decline in value when it is increasing in quantity at the rapid rate of \$100,000,000 per annum.

The Secretary devotes the balance of his report to minor details of the bureau. The document is a clear, logical and forcible one, and a careful perusal of it must convince the reader that the extraordinary issues of the day have been met manfully and openly by a master mind.

RAILROAD MISCELLANY.

DETROIT AND MILWAUKEE ROAD.—Arrangements have been made for the running of trains on this road during the winter. Trains will run during the month of December as follows:

Going West.—Mixed train departs at 7.20 A. M. for Grand Rapids; Mail train at 10.15 A. M. for Milwaukee; Mixed train at 3.45 for Fentonville.

Trains Arrive.—Accommodation from Fentonville at 10.05 A. M.; Mail from Milwaukee at 5.25 P. M.; Mixed from Grand Rapids at 6.45 P. M.

MICHIGAN CENTRAL RAILROAD.—The following shows the earnings of the Michigan Central Railroad Company for the past six months, ending November 30th, being the first half of their present fiscal year:

	1861.	1862.
June.....	\$133,619	\$174,101
July.....	123,377	172,139
August.....	144,982	216,624
September.....	236,845	295,956
October.....	397,232	322,569
November.....	246,040	Estd. 309,000
Totals.....	\$1,188,244	\$1,490,139
1861.....		1,188,244

Gain over last year..... \$301,895

GREAT WESTERN RAILWAY.—The following shows the traffic for the week ending 28th of November, 1862:

Passengers.....	\$19,498 25½
Freight and live stock.....	46,895 87
Mails and sundries.....	1,329 61
Corresponding week of last year.....	\$67,723 73½
Increase.....	48,466 34
Increase.....	\$19,257 39½

FLINT AND PERE MARQUETTE RAILROAD.—This road is now finished between Flint and East Saginaw, and passenger trains will commence running on Monday next. This event marks a new era in the history of Flint. Dr. Potter, the Superintendent, is entitled to great credit for the ability and energy he has displayed in pushing the road to Flint before the final setting in of winter.—*Flint Democrat.*

RAILROAD DAMAGES.—The case of Perkins, who was killed at the Sauquoit accident, on

the New York Central, in 1857, has resulted in a verdict of \$3,000 in favor of the administrator, George H. Perkins.

The following are the earnings of the Chicago and North-Western Railroad for the first three weeks in November:

1862.....	\$79,816 91
1861.....	60,675 15

Increase..... \$19,141 76

The anticipated increase for the month over same period of last year is \$30,000. Since the commencement of the company's fiscal year, in April, to Dec. 1, eight months, the fourth week in November being estimated, the company shows an increase of \$112,206 37.

The earnings of the Michigan Central Railroad for the month of November:

1862.....	\$307,474 61
1861.....	242,089 13

Increase..... \$65,385 48

The earnings for the Toledo and Wabash Railway Company for the month of November were:

	1861.	1862.
Passengers.....	\$17,123 50	\$21,921 43
Freight.....	119,992 49	125,526 23
Total.....	\$137,035 99	\$147,547 66
Increase.....		10,461 66

The earnings of the Chicago, Alton, and St. Louis Railroad, for the week ending Nov. 30, were as follows:

	1862.	1861.
Passengers.....	\$7,442 87	\$4,753 80
Freight.....	16,203 27	11,122 28
Sundries.....	935 33	815 33
Total.....	\$24,581 47	\$16,692 61
Increase in 1862.....		7,888 96

Total this month to date..... \$106,086 33 \$101,233 74
Total since Jan 1..... \$1,108,165 82 \$1,018,168 47

The Norwich and Worcester Railroad will soon be connected with the Western Railroad by a branch running from Webster, Mass., through Southbridge to Palmer, thus increasing the business of the Norwich Road, and proving of great benefit to the town of Southbridge, the locality of the Hamilton Mills.

The following is a comparative statement of the earnings of the Rome, Watertown, and Ogdensburgh Railroad for November:

1862.....	\$56,169 47
1861.....	47,873 99

Increase..... \$8,195 43

The earnings of the Harlem Road for the month of November were:

1861.....	\$91,110 71
1862.....	99,135 50

Increase..... \$8,024 79

Earnings of the Chicago and North-Western Railroad for the fourth week of November:

From passengers.....	\$7,978 96
From freight.....	10,243 02
From mails and express.....	895 87

Total..... \$18,917 85
Same time in 1861..... 29,421 34

Increase in 1862..... \$7,433 47
The total earnings for the month of November, 1862, were..... \$107,734 76
November, 1861..... 80,742 23

Increase in 1862..... \$26,992 53

The earnings of the Erie Railway for the month of November were:

1862.....	\$903,016 30
1861.....	534,109 94

Increase..... \$368,906 36

The above earnings compare very favorably with those of the Central for the same month, which were \$963,185. The increase in November on the Erie Road, it will be seen, was \$168,908 against \$10,224 on the Central in November, and \$87,910 in October and November.

The Chicago and Alton Railroad earned for the week ending Dec. 7, 1862:

	1862.	1861.
Passengers.....	\$8,752 40	\$5,614 55
Freight.....	16,536 35	11,553 00
Sundries.....	674 33	815 33
Total.....	\$25,922 56	\$17,883 88
Increase in 1862.....		8,240 70

Total this month to date..... \$25,273 58 \$17,982 33
Total since Jan. 1..... \$1,134,389 40 \$1,036,151 55

The earnings of the Milwaukee and Prairie du Chien Railroad for the first week in Dec., were:

1862.....	\$16,230 18
1861.....	12,613 60

Increase..... \$3,616 58

The earnings of the Great Western Railway of Canada for the week ending 5th inst., are as follows:

1862.....	\$62,659 35
1861.....	51,470 21

Increase..... \$11,189 14

The traffic of the Illinois Central Railroad for November was:

LAND DEPARTMENT.

Acres of Construction Lands sold.....	6,798.53	\$32,651 32
Acres Int. Fund Lands sold.....	720.00	6,280 90
Acres of Free Lands sold.....	1,963.49	20,823 99

Total sales in Nov., 1862..... 8,482.02 \$79,733 04
To which add town lot sales..... 800 00

Total of all..... \$80,533 04

Acres sold since Jan. 1, 1862..... 73,879.46 \$334,093 04
Acres sold previous (net sales)..... 1,260,273.46 16,147,983 91

Total..... 1,334,152 92 \$16,982,076 95
Construct'n bonds canceled prev. to Nov. 30..... \$2,253,500 00
Cash collected in November..... 52,994 38
Net collections to Oct. 31, 1862..... 4,530,277 24

TRAFFIC DEPARTMENT.

Receipts from Passengers.....	\$150,413 95
Receipts from Freight.....	204,395 90
Receipts from Mails.....	6,312 33
Receipts from Rent of Road.....	3,530 00
Receipts from other sources.....	5,000 00

Total receipts in month of November, 1862..... \$369,718 18
Total receipts in month of November, 1861..... 243,248 68

Increase..... \$126,469 50

The earnings of the St. Louis, Alton, and Terre Haute Road for the third week of November were:

1862.....	\$29,638 64
1861.....	17,970 56

Increase in 1862..... \$11,668 08

RAILROAD IN MEXICO.

The French are building a military railroad from Vera Cruz to Orizaba, a distance of about 90 miles. The object to be gained is the facilitating of the transportation of supplies from the sea-coast to their army in the interior. It will thus be seen that so much good at least will result to distracted Mexico, from the French occupation of her soil. Much of the material for the construction of this road has been shipped from New York City.

INTERNAL REVENUE.

The Internal Revenue Law has proved much more of a labyrinth than its framers ever designed or supposed it could be. And when it is reflected that this is our first experience, as a nation, in excise and stamp taxes, it is not to be wondered at that many questions are constantly arising that have to be settled. An amendatory act has just passed the House of Representatives, which authorizes the assessors and collectors, and assistants and deputies, to administer oaths and affirmations in all cases where they are required, but no fees are to be charged or allowed therefor.

The Commissioner of Internal Revenue is authorized to furnish to the assistant treasurers or collectors of the United States at San Francisco and Portland, Oregon, with adhesive stamps or stamped paper, vellum, or parchment, according to the provisions of the Internal Revenue Laws under such regulations and conditions. He may, from time to time, prescribe, and without requiring payment in advance therefor, provided no greater commission shall be allowed than is now provided by law.

Any stamp appropriated to denote the duty charged upon any particular instrument, and bearing the name of such instrument on the face thereof, which may have been used, or which shall hereafter be used for denoting any other duty of the same amount, shall be deemed and taken to be good and valid, provided the provisions of this section shall not apply to any stamp appropriated to denote the duty charged on proprietary articles. All instruments, documents, and papers subject to duty, used by the officers of the United States Government, where the United States would be chargeable with the duty or stamp thereon; and all instruments, documents and papers of the Executive Department of the several States subject to duty, where any State would be chargeable with the duty and stamp thereon, and also all instruments, documents and papers relating to the procurement of bounty land and other bounties, pensions and orders of pay by or for officers, soldiers and seamen, or other legal representatives, who have been or may be in the service of the United States, are exempt from duty.

The ninety-fifth section of the Internal Revenue act of July 1, 1862, is so amended that no instrument, document or paper, made, signed, or issued prior to the 1st of March, 1863, without being duly stamped, or having thereon an adhesive stamp to denote the duty imposed thereon, shall for that cause be deemed invalid and of no effect, provided that section seventy-four of the act, entitled "An act increasing temporarily the duties on imports, and for other purposes," approved July 14, 1862, is hereby repealed. All goods, wares, and merchandise, or articles produced or made, and finished ready for sale, and re-

moved for consumption prior to the 1st day of September, 1862, whether actually removed or not from the place of manufacture, shall be and hereby are exempt from duty upon proof being made to the satisfaction of the Assessor of the District, who shall hear and determine the same, that they were so made and finished ready for sale and removal for consumption, and where any duties shall have been assessed and collected upon such goods, wares, and merchandise, or articles so made and finished as aforesaid, the same shall be and hereby are remitted, and, if actually collected, refunded by the Commissioner of Internal Revenue, under such regulations as he may prescribe.

Hotels, inns or taverns, and eating-houses, having taken out the license provided therefor, shall not be required to pay any other license for the sale of any articles customarily furnished by hotels, inns or taverns, and eating-houses, and not prohibited by the laws of any State or Territory where the same may be located, in violation thereof.

The Commissioner has recently made the following decisions: The word "agent," as used in the 74th and 75th sections of the Excise Act, is construed to mean either a person who is the exclusive agent of a manufacturer, or any person or firm selling goods on commission, designated by a manufacturer as his agent for the sale of his manufactures. In all cases the manufacturer will be required to make known to the Assessor or Assistant Assessor of the district the name and place of business of the agent so designated.

When persons are employed by tobaccoists or dealers in cigars, whether in some town or at a distance therefrom, to manufacture cigars, and for this purpose to receive tobacco from their employers, to be made into cigars, which, when finished, are returned to the employers, such persons may not be required to pay the value thereof, provided at the request of the assessors they make out a list subscribed and sworn to, which list shall state the number of cigars so made during each month, and, as near as may be, the value thereof, with the name and residence of the person to whom the cigars have been returned. If the same employer, to whom the cigars are returned, resides or has his usual place of business in a district in which the list is made out, then the Assessor shall transmit it to the Assessor of the district where such employer resides or has his usual place of business, to the end that the duties due thereon under the Excise law may be paid by the employer; but if the parties live in the same district, the Assessor will assess the amount due on such lists to the employer.

The Commissioner has also decided that licensed bankers, as well as incorporated banks, may draw and sell their own drafts on their surplus funds accumulated in the ordinary course of business in other places, without a broker's license, as their selling of such drafts is not dealing in exchanges relating to

money within the meaning of law subject to the notification of the incorporated banks, and licensed bankers must have the licenses of brokers if they do the business of a broker, as described in the law.

REPORT OF THE COMMISSIONER OF THE LAND OFFICE.

We publish below some very interesting extracts from the Report of the Commissioner of the Land Office, showing the development of the Territories of our country, the amount of Land Grants to Railroads, and the resources of the country yet to be developed by the great Pacific Railroad.

The report is voluminous. During the year surveys have been made in Wisconsin, Minnesota, Dakota, Nebraska, Kansas, New Mexico, Colorado, California, Oregon, Washington, Nevada, Iowa, Illinois, and Missouri. On the 30th Sept., 1861, there was of public lands on hand surveyed, offered, unoffered, and unsold, 134,218,359.89 acres; deduct disposed of during the quarter ending 30th September, 1861, 185,869.87 acres, leaves, on 30th June, 1861, surveyed, offered, unoffered, and unsold, 134,032,461.02 acres. To this add lands returned as surveyed during the year ending 30th June, 1862, 2,673,131.32 acres; also those returned as surveyed in quarters ending 30th September, 1862, 461,936.09, making a total of 137,167,528.43 acres, less the land disposed of during the five quarters ending 30th September, 1862, as hereinafter indicated, 2,024,528.43, leaving surveyed, offered, unoffered, and undisposed of on the 30th September, 1862, 135,142,999 acres. This aggregate consists of unoffered lands, 51,223,349.38 acres; offered lands, 82,919,649.62 acres, including the lands in California, referred to in the report of 1861 as then under proclamation.

During the year ending 30th June, 1862, there were disposed of for cash 144,849.97 acres, amounting to \$125,048.30; located with bounty land warrants, 611,826.84 acres, certified under railroad grants to Iowa and Michigan, 597,129.10 acres; approved and certified during the same as swamp land, 24,116 acres—making an aggregate disposed of during the year ending 30th June, 1862, of 1,377,922 acres.

During the quarter ending 30th September, 1862, there were sold for cash (part estimate) 9,408.68 acres for \$12,427.96; located by bounty land warrants (part estimated) 100,228.93 acres; certified under railroad grants to Wisconsin and Minnesota, 536,768.82 acres; approved in same quarter as swamp lands, 200 acres. Total quantity disposed of in the five quarters, ending 30th September, 1862, 2,024,529.43 acres; aggregate cash receipts during same period, \$137,476.26.

PUBLIC SALES.

On the 28th of May, 1862, the President's proclamation was issued for sales in Oregon, to take place in October, 1862, embracing 4,422,700.98 acres, and on 30th May, 1862, a proclamation was issued for a sale in Wisconsin, also to take place in October, 1862, for 824,023 acres, making an aggregate proclaimed since last report of 5,256,963.98. There are now about two and three-fourths millions of acres in Washington Territory surveyed and ready for market, which it is proposed to recommend for proclamation. The Department has granted during the year 537,471 land warrants, representing 58,876,430 acres. There

were, at the date of the report, 65,910 warrants outstanding and unsatisfied.

RAILROAD GRANTS.

By approved lists, conveying title in virtue of the act of August 3, 1854, there have been certified during the year ending 30th June, 1862, to the State of Iowa, 108,362.28 acres; to the State of Michigan, 488,766.81 acres,—making in the aggregate 597,129.10. No approvals have been certified for Iowa or Michigan in the quarter ending 30th September, 1862. Lists of railroad lands were, however, made up in September, 1862, as follows:

For Wisconsin, acres.....	342,252.05
For Minnesota, acres.....	194,517.77
Total.....	536,769.82

Under the railroad grants, by acts of 1856 and 1857, the following quantities have been certified to the several States, as hereinafter mentioned:

Acres.	Acres.
Iowa.....2,539,903.29	Florida.....1,759,160.00
Wisconsin.....533,315.05	Alabama.....1,868,275.00
Minnesota.....1,085,283.67	Mississippi.....171,550.00
Michigan.....2,062,494.23	Louisiana.....1,072,405.35

Making a total of acres.....11,132,396.09

The report deals at length with the railroads of Illinois, Minnesota, Wisconsin, and elsewhere, and treats of the swamp lands of Minnesota, Oregon, Iowa, and Louisiana. The number of acres of swamp lands approved to the several States the beneficiaries under the grants of 1849-1850, from the commencement of operations to 30th September, 1862, is 44,498,351.02 acres.

Iowa is the only State that has signified its acceptance of lands granted for the support of agricultural colleges.

That portion of the report which relates to the progress of land surveys says of Florida and Louisiana that the surveying operations were interrupted on the 6th of Feb., 1861, by the Surveyor-General's delivery of the archives and other evidences of the surveys, both of public lands and private claims, to the insurrectionary authorities.

The land surveys elsewhere for the year may be summed up in acres thus:

California.....106,118	New Mexico.....23,024
Dakota.....512,144	Nevada.....147,584
Minnesota.....21,641,345	Kansas.....15,898,667
Iowa.....Office closed	Nebraska.....10,968,909
Oregon.....6,217,681	Wisconsin.....32,072,695
Colorado, 258 miles of standard lines and 227 miles of township lines.	Washington Territory.....2,803,457

COLORADO.

The Surveyor General submits an interesting report of the natural resources of this Territory. The gold product is reported as no longer an experiment. Claims are being worked at a depth of 200 feet, the deeper the lodes are worked, the richer the quartz. The principal gold-bearing region, as at present discovered, extends from the vicinity of Long's Peak, in a southwesterly direction, to the heads of San Juan River. The products of the mines the last year was about \$5,000,000. The gold yield for the present year, it is estimated, will reach \$10,000,000. Lead, iron, and coal are also found to exist in considerable quantities in the mountains.

The valleys of the mountain streams, in which the supply of water is constant, are fertile, and adapted to agricultural purposes. The Surveyor General reports that there are many stock ranches in the valleys, and that little attention is paid to raising crops by reason of the shortness of the crop-growing season. On the Huerfano and the Arkansas Rivers are the most extensive grass-growing

farms east of the mountains. On the Rio Grande and its tributaries is a large population, mostly Mexican, engaged in agricultural and pastoral pursuits.

OREGON.

In this State the surveys have progressed to the extent of the means provided, the field of operations having been confined, east of the Cascade Mountains, to the valleys of the Deschutes and Umatilla Rivers, in the vicinity of Columbia River. The Surveyor-General reports the existence of rich and extensive gold mines in the north-eastern part of Oregon, and that the country surrounding the mines is adapted to agricultural pursuits.

WASHINGTON TERRITORY.

The surveys of the public lands in Washington Territory have reached within a few miles of the 46th degree of north latitude, which constitutes the boundary between that Territory and Oregon, not yet defined by land marks.

NEW MEXICO.

The surveys of the public lands and confirmed private claims in New Mexico during the past fiscal year have not only been delayed by difficulties attending the identification of the true limits of private claims in the field, owing to vague descriptions in the grants, but seriously interrupted by Indian hostilities, and the incursion of the Rebel troops occasioning the removal for safety of the surveying archives to Fort Union. The mineral wealth of the Territory is represented to be immense, both in the precious and useful metals.

THE PACIFIC RAILROAD.

By the act of Congress, approved 1st May, 1862, to aid in the construction of a railroad and telegraph from the Missouri to the Pacific, a grant of land is made, excluding mineral, of every alternate odd-numbered section, to the amount of five alternate sections per mile, on each side of the route.

In regard to the Missouri or Eastern Division of the Road, the agent of the Leavenworth, Pawnee and Western Railroad Company of Kansas filed, in July last, in this office, a map and diagram of the probable route of the road west of the town of Lawrence, in that State, from a point on the left bank of Kansas River opposite said town; west along the left bank of said river to the left bank of the Republican Fork, thence along the left bank of that Fork to the 100th meridian of longitude west from Greenwich, and instructions under date 17th July, 1862, were dispatched accordingly to the proper officers in Kansas and Nebraska, to make the requisite withdrawal of public lands along the route, within fifteen miles thereof, under the requirements of the 7th section of said Act of 1st of July, 1862.

In regard to the Pacific portion, the agents of the Central Pacific Railroad Company have likewise filed in this office a map and diagram designating the probable route of said road east from a point at the Sacramento River, near the mouth of the American River, in California, thence in a north-easterly direction to the big bend of the Truckee River, in Nevada Territory. Instructions were, therefore, addressed, 2d of August last, to the Register and Receiver at Marysville, California, to make the necessary withdrawals.

A question has been raised, in connection with the withdrawals in the Junction City District, as to whether these withdrawals should embrace the even-numbered or non-granted sections, and whether such even-numbered sections should not be relieved from withdrawal and laid open to preemption, sale, and location.

The subject was considered in instructions bearing date 12th September, 1862, for the government of the Register and Receiver, as submitted to the Secretary of the Interior, and approved by him on 24th September, 1862.

The principles laid down in these instructions protect, in virtue of the act of March 27, 1854, preemptions upon either of the odd or even-numbered sections, who had actually settled thereon before the receipt at the District Land Office of the order of withdrawal, and in accordance with the act of March 3, 1853, recognize the right of preemption settlement upon the even-numbered sections—even, subsequent to the reception of said order, where such settlements were made prior to the "final allotment of the ultimate sections to the Railroad," but at the enhanced minimum of \$2 50 per acre, as stipulated in said act of 1853.

In view of the 3d and 7th sections of said act of July 1, 1862, it is held, however, that this office has not the power to lay open to ordinary sale or location the even-numbered sections, without the further orders of Congress.

In passing from the consideration of the preliminary questions which have arisen in connection with the Pacific route, the importance of which to the prosperity of the country can not be over-estimated, it will be found that Congress has dealt with the measure in a corresponding spirit of liberality. As the grant, which awards to the work five alternate sections per mile on each side of said road, thus conceding a belt of 6,400 acres for every mile of its length, embracing about 15,500,000 acres.

That measure, with our existing thirty thousand miles of railway, now spreading from the Atlantic beyond the Mississippi, will form a great continental system reaching from ocean to ocean, eventually intersecting every political subdivision of the United States, thereby giving impetus to domestic trade and intercourse, opening new fields of labor and prosperity within our limits, while our wealth will be increased by the rich Eastern trade, through our mercantile marine on the Pacific, with China and Japan and distant India.

RESOURCES OF THE COUNTRY.

Coal is found in great variety and abundance between the Mississippi and the Pacific. That important element, so essential for domestic, mechanical, and for navigation purposes affecting our vast internal intercourse and trade, and our external commerce, is, of course, a very prominent subject of interest to our people. The extent of the twelve coal-bearing States east of the Mississippi holds but a small proportion to the immense coal-fields west of that region, as we have information reporting the existence of coal in Dakota, Kansas, Nebraska, Colorado, Utah, Nevada, California, Oregon, and Washington.

A railroad about six miles long is projected from the San Jacinto, extending south toward the Mount Diablo, for the transportation of coal from the mines there, designated as the Pittsburg, Union, and Eureka. Discoveries of coal have been made at Bellington Bay, Washington Territory. This coal contains a very large amount of oxygen, and but little hydro-carbon; so much so that it gives off comparatively but little combustible luminous gas or smoke, and appears to be almost as difficult of ignition as semi-anthracite.

It is regarded as a fuel superior to any tertiary lignite, approaching the composition of the coal of the Western States, taking a high rank as a fuel in comparison with ordinary lignites.

Then there are the Willamette River and Cape Flattery coals, belonging to the lignite type, and serviceable for the smelting of iron and for ordinary fuel some of the Cape Flattery coal being reported as pretty good for steamboats.

In Nevada, good coal has been discovered in the neighborhood of Dayton, formerly China Town, and superior specimens have reached here from Colorado, showing the wealth of that Territory in this great industrial agent.

The great auriferous region of the United States on the western portion of the continent stretches from the 49° north latitude, and Page Sound to 31° 30' parallel, and from the 102° of longitude west of Greenwich to the Pacific Ocean, embracing portions of Dakota, Nebraska, Colorado, all of New Mexico, with Arizona, Utah, Nevada, California, Oregon, and Washington Territory. It may be designated as comprising 17 degrees of latitude, or a breadth of 1,100 miles from north to south, and of nearly equal longitudinal extension, making an area of more than a million of square miles.

This vast region is traversed from north to south, first, on the Pacific side by the Sierra Nevada and the Cascade Mountains, then by the Blue and Humboldt; on the east by the double ranges of the Rocky Mountains, embracing the Wassatch, the Wind River chain, and the Sierra Madre—stretching longitudinally and in lateral space—crossed and linked together by intervening ridges, connecting the whole system by five principal ranges, dividing the country into an equal number of basins, each being nearly surrounded by mountains, and watered by mountain streams and snows, thereby interspersing this immense Territory with bodies of agricultural lands equal to the support not only of miners, but of a dense population.

These mountains are literally stocked with mineral, gold and silver being interspersed in profusion over this immense surface, and daily brought to light by new discoveries. The precious metals are found imbedded in mountains of quartz, rich washings marking the pathway of rivers and floods.

Beside their wealth in gold, no part of the world is so rich in silver mines as Nevada and New Mexico; yet these may be estimated as only in proportion to the gold fields, which are in process of development with amazing results. The recent discoveries in the Colorado, or southern portion of California, and in the region stretching thence away up to, and north of, the Salmon River in Washington Territory, are every day stimulating the mining enterprise of our people.

Prior to the gold discoveries in 1848 at Sutter's Race, in California, the gold product of the world was only an annual average of \$18,000,000.

In 1853 the yield of California was \$70,000,000, about four times the aggregate gold product of the world prior to 1848, and that sum may be set down as the present average from that State alone. If we compare the known gold fields elsewhere in our public domain with the yield of California, we would have, if an equal ratio of labor was applied, an annual value of between \$300,000,000 and \$400,000,000.

Even in the distant Territory of Washington, the extreme mosaic block of the Union, the product of the Salmon River Mines has been estimated at \$20,000,000 the present year—the developments there, too, having been made under severe disadvantages; first, in a season of unusual severity, with deep snow; next, in restricted facilities of travel into the

interior, and with inadequate labor, and in times of domestic turmoil.

An immense revenue may be readily obtained by subjecting the public mines either to labor, under quarterly payments or quarterly tax, as seigniorage, upon the actual product, under a well-regulated and efficient system, which would stimulate the energies of miners and capitalists, by securing to such classes an undisputed interest in localities for specified, and, when the conditions as to payment for the usufruct are complied with, for unlimited periods, and, while effecting this, with beneficial results to them, would relieve the necessities of the Republic.

Assuming the national debt, on the 1st of July, 1863, to be \$778,000,000, the Commissioner says that a tax of some 8 per cent. on the whole yield of the mines would, upon the maturity of a proper mining system, and when the same shall eventually go into full operation, pay off this interest, enable the Government to reduce, by at least two-thirds, the existing direct tax, and from the residue and imposts, have an annual income sufficient to support the Government, and provide a fund for the gradual extinction of the public debt, and restore the currency to a metallic basis.

The usual size of a mining claim in the quartz region is 100 ft. on the line of the lode or vein, and 100 ft. on each side, equal to an area of 20,000 square feet; or say 1,200 claims to the square mile. Allow that only one-hundredth part of the mountain surface is occupied by paying leads or veins, there will be space for 3,600,000 claims. But Gov. Evans, of Colorado, estimates the already discovered gold-bearing region of that Territory as affording ample room for 800,000 claims, and states that new discoveries are daily increasing this area.

A glance at the map is sufficient to show that the mineral region of Colorado occupies less than one-sixth of the whole extent under consideration; but assume it to be one-sixth, there will be ample extent on this basis for 4,800,000 claims which, if worked, would give employment to 20,000,000 of men. Quartz that yields \$12 per ton will pay in favorable localities, but there are many veins now worked that yield from \$20 to \$300 per ton, and some that yield from \$500 to \$2,000 per ton, varying in different parts of the same lode. Some of the recent discoveries are estimated as \$20,000 per ton, but these have not been worked.

In addition to the deposits of gold and silver above specially alluded to, various sections of this whole region are rich in precious stones, marble, gypsum, salt, tin, quicksilver, asphaltum, coal, iron, copper, and lead; mineral and medicinal, thermal and cold springs and streams.

None of these mines have been worked for a great length of time, except the placers of California, and much the largest portion of them are comparatively recent discoveries; yet it has been fully demonstrated that the deeper the mine is worked, the richer is the ore or rock. Mines that hardly paid at the surface are yielding enormous profits at a depth of 150 to 200 feet. And when the geological formation of this region is carefully considered, it will be conceded that even the precious metals must be found in masses and in position, if a sufficient depth shall be reached.

The above estimate of the extent of the mines may seem extravagant, but it is believed experience will demonstrate that the estimate is too low. Not now, nor for many years to come, because the population is not there,

but as fast as the population does reach that region, the correctness of these conclusions, it is believed, will be vindicated.

Within the past eighteen months more has been done to establish the position assumed than all the discoveries previously made. The coming year and a half will do still more.

The yield of the precious metals alone of this region will not fall below \$100,000,000 the present year, and it will augment with the increase of population for centuries to come.

The value of these mines to the country is absolutely incalculable—to the Government they may be made to yield in revenue just in proportion to the number of men employed in working them. This year they should yield \$10,000,000, and would do so under the operations of a well matured system. The experience of miners in those districts which have been successfully worked has demonstrated the propriety, and, I may add, the necessity of dividing the mineral lands into small parcels or claims.

This office can not recommend any measure for the sale of the mineral lands, but would advise the retention of the fee in the United States, and that they be held open to the free occupation of all our people; subject only to a nominal annual license, and such monthly, quarterly, or annual moderate percentage upon the product as shall be prescribed by law. A limitation as to the quantity which may be held by any person is also advised, with the guaranty that such quantity may be retained as long as the location shall be occupied, worked, and payments duly made to the Government.—*N. Y. Tribune.*

THE DIFFERENCE IN THE PROPERTIES OF HOT-ROLLED AND COLD-ROLLED MALLEABLE IRON.

The author states that he had been desirous of examining whether differences in the change of degree of supermagnetic magnetism, such as are exhibited by different iron ships, might not depend on the temperature at which the iron is rolled in the last process of its manufacture. By the good offices of Mr. Fairbairn he had received gratuitously from Richard Smith, Esq., Superintendent of Lord Dudley's Iron Works at the Round Oak Works near Dudley, twenty-four plates of iron, each 16 inches long, 4 inches broad, and one-quarter inch thick; twelve of which, after having been manufactured with the others in the usual way, had been passed through rollers when quite cold. Each set of twelve was divided into two parcels of six each, one parcel being cut with the length of the bars in the length of extension of the fibres of the iron, the other being cut with the length of the bars transverse to the length of extension.

For experimenting on these, a large wooden frame was prepared, capable of receiving the 24 bars at once, either on a plane transverse to the direction of dip at Greenwich, or on a plane including the direction of dip. In some experiments these planes were covered with flag-stones, and the bars were laid upon the flag-stones; in others, the bars were laid immediately upon the wood. While there lying, they were struck with iron or wooden hammers of different sizes. The bars of the different classes were systematically intermingled, in such a way that no tendency of the arms to give blows of a different force or kind in special parts of the series could produce a class error in the result. For examination of the amount of polar magnetism in each bar, it was placed at a definite distance (5 inches)

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	48		\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.	64	380	13,111,800	10,781,833	566,071	3,922,203	2,303,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do										"	2,500,000	6	95	1885	
do do										"	700,000	6	84	1880	
do do										"	1,125,500	6	90	1875	
do Washington Branch.....	Md.	30		1,650,000						"	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	139,129	314,090	8,795	Dec. 1860.	1st Mortgage.....	1,000,000	7	55	1866	
do do										2d	160,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	60	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	138	96	3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	3,770,000	6	100	1864	
Central Ohio.....	Ohio	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7	62½	1861	
do do										1st	800,000	7	80	1864	
do do										2d	80,000	7	64	1865	
do do										3d	95,000	7		1865	
do do										4th	1,365,000	7		1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d	1,535,000	7			
do do										3d	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,756	7,335,493	50,388	720,705	230,119	Apr. 1, 1861.	Pref. 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	101½	Feb. & Aug. 1	
do do										2d	3,600,000	7	77	May 1.	
do do										2d	2,660,000	6	31		
Chicago and Rock Island.....	Ills.	78	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	105	1870	
Chicago, Burlington and Quincy.....	"	89	138	4,089,340	4,814,515		1,514,428	761,630		Cons. 1st Mort. S. F.	2,172,000	8	110	1863	
do do										2d	813,000	8	108	1860	
do do										1st Mor. Chi. & Aur.	390,000	7		1867	
do do										2d	303,090	7		1869	
do do										1st "Cent. Mil. Tract	392,000	7		1864	
do do										2d	245,000	8		1868	
Chicago, Iowa and Nebraska.....		82		No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	105	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d	950,000	7	100	1880	
Cincinnati, Wilmington & Zanesville..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d	532,000				
do do										3d	104,000				
do do										Income.....	305,500				
Cleveland and Mahoning.....	Ohio.	68½		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d	499,000	7			
do do										3d	344,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	40	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1860	
do do										2d " M. L. or Int. Ex.	1,125,000	7	99½	1873	
do do										3d 2d Ex.....	1,165,000	7	75	1865	
Cleveland and Toledo.....	Ohio.	69	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	4th 3d Ex.....	1,154,000	7			
do do										1st Mor. Jun. 1st Div.	359,000	7	103½	1867	
do do										1st " " 2d Div.	263,000	7		1872	
do do										2d " " "	265,000	7		1862	
do do										1st " Tol. Nor. & Clev	521,000	7		1863	
do do										2d " " "	293,300	7		1861	
do do										Junction Income..	44,500	7		1862	
do do										C. & T. Income..	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	145	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	145	98½	3,000,000	1,662,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	106	1861	
do do										2d	303,000	7		1862	
Columbus and Xenia.....	Ohio.	115	54½	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700	100		1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666	2,512,000	292,267	375,002	212,107		2d	2,212,000	8			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	390,000	7	50		
Detroit and Milwaukee.....	Mich.	166		No report						1st Mortgage.....	2,500,000	7	90	1875	
do do										2d	1,000,900	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		986,061	1,219,100	249,668	124,140			2d	180,000				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d	180,000				
Galena and Chicago Union.....	Ills.	80	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000		104	1862 & 1863	
do do										2d	1,520,000		100	May 1, 1875	
Great Western.....	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report	75,000	63,141	13,573		Land Mortgage...	5,000,000				
Greenville and Miami.....	Mo.	206		300,000	473,000	220,356	996,907	512,933	Sept. 1, 1860.	Mortgage Conv....	1,354,000		54½		
Hannibal and St. Joseph.....	Mo.			1,041,086	10,554,000					1st Mortgage.....	927,000	6	30	1873	
do do										1st Mortgage.....	4,000,000	7	118	1869 & 1870	
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	2d S. F.	2,000,000	7	114½	180	
Hudson River.....	N. Y.	75	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	3d	1,840,000	7	101½	1875	
do do															
Illinois Central.....	Ills.	77½	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000	7	109	1868	
do do										Construction.....	12,885,000	7	100	1875	
do do											4,115,000	6	97	1875	
do do										Debentures.....	42,740	7	96		
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000	7			
do do										2d	578,000	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		Income.....	38,700	10			
do do										1st Mortgage.....	500,000	7		1866	
do do										2d	400,000	7	90		
Indianapolis Pittsburgh and Cleveland	Ohio.	84		635,971	1,023,284	9,936	277,852	36,773	Dec. 31, 1860.	Real Estate Mort...	200,000	7			
do do										1st Mortgage.....	649,984	7	90		
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d	314,000				
Iron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock	Lev. of Bond.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.	86½		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st	289,000	7	75	1861
do										2d	392,000	7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,632	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st	260,000	7		
do										2d " Conv.	1,000,000	7		
do										3d "	600,000	7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	903,000			
do										2d " E. D.	1,000,000	89		
do										1st Land Grant W.D.	4,000,000		21	
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.	29		514,433	130,000		105,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		
Little Miami.....	Ohio.	65		1,169,59	384,519		1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000			1893
Louisville and Frankfort.....	Ky.	65					245,910	98,679	June 30, 1861	1st Mortgage.....	248,000			
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st Mortgage.....	2,000,000	7		
do										1st " Lebanon Br.	400,000			
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,827	371,402		1st " Memphis Br.	500,000			
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861
Marietta and Cincinnati.....	Ohio.	208		8,561,213	196,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868
do										2d "	2,000,000	7		
do										3d "	1,500,000	7		
do										Sterling Income...	333,000	4		
Michigan Central.....	Mich.	91½	224	6,037,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	Domestic	928,617			
do										1st Mortg. Sterling	467,433	6	98½	1872
do										1st " Conv.	500,000	8	84	1869
do										1st " unconv.	250,000	8	96	1860
do										1st " Dollar Conv.	2,598,000	8	106	1869
do										1st " S. F. Conv.	4,153,000	8	112½	1862
Michigan South'n & North'n Indiana	Mich. &	38½	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. So.	991,000	108		1860
do										" Nor. Ind.	935,000	103		1861
do										" Goshen Line.	1,168,600	100		1868
do										S. F. Toledo	2,850,000	103½		1885
do										2d Mortgage	2,465,000	93½		1877
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d "	200,000	7		
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8		
do										2d "	600,000	8		
Milwaukee and Prairie du Chien....	Wis.	34	192	4,944,000	2,556,000		683,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	104	1891
Milwaukee and Western.....	Wis.	71		No report										
Mississippi and Missouri.....	Iowa,	35		No report										
do										1st Mortgage Conv.	1,000,000	7	96	
do										2d " S. F.	400,000	8		
do										Oskaloosa Div.	1,425,000	7		
do										Land Grant.....	7,000,000	7		
New Jersey.....	N. J.	34		4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000		109	
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	3,000,000		106	
New York and Erie Pref.	N. Y.	92½		Sold under mortgage			5,590,916	1,979,403	Sept. 30, 1860.	2d "	4,000,000		110	
do										3d "	6,000,000		167	
do										4th "	4,900,000		101	
do										5th "	1,792,500		97	
New York and Harlem Pref	Conn.	50		5,717,190	6,055,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	109½	1873
do common										2d "	1,000,000	7	107	1864
New York and New Haven.....	Conn.	21		3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	7	94	Dec. 1, 1866
do										"	978,000	6		Oct. 1, 1875
New York Central.....	N. Y.	103½	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.	7,925,000	6	103	May 1, 1883
do										Mortgage.....	3,000,000	7	109	June 15, 1864
Northern Central.....	Md.	138		2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,026,500	6		1885
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000			
Ohio and Mississippi, Eastern Div.	Ohio & Ind	192		Leased.	9,880,000	2,330,030	898,217	153,669	May 1, 1861.	1st Mortgage.....	2,193,500			
do										3d "	316,995			
do										Construction.....	4,637,920			
do										Income.....	3,591,185			
Ohio and Mississippi, Western Div.	Ills.	148			3,292,403		No report			State Loan.....	7,000,000			
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" " S. W....	2,800,000	6		
do										Construction.....	4,500,000	6		
Pennsylvania.....	Pa.	350		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,905,000	6	104½	1888
do										2d "	2,319,000	6	98½	1875
do										2d " Sterling.	1,957,410	6		1875
do										State Works.....	7,200,000	5	89	
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report			1st Mortgage.....	2,300,000	6	90½	1894
Philadelphia, Wil. and Baltimore....	Del.	98		5,600,000	2,390,000		1,236,597	471,712	Oct. 31, 1860.	Improvement.....	119,000	6		1863
do										1st Mort. O. & P.	1,000,000	7	105½	1865
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	51	467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	2d "	750,000	7	90	1866
do										1st " O. & I.	1,000,000	7		1872
do										2d "	380,000	7		1873
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000			
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,065,328	220,850	68,438	May 10, 1861.					
Sandusky, Dayton and Cincinnati. .	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856
do										"	997,000	7		1866
do										"	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	195,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1888
Scoto and Hooking Valley.....	Ohio.	56		400,975	500,000	100,000	110,200	53,100						
Springfield, Mt. Vernon & Pittsburgh.	Ohio.	50		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000			
do										2d "	450,000			
Staubenville and Indiana.	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d "	900,000	7		1865
do										1st Mortgage Conv.	1,000,000	7	98	1862
do										2d " Conv.	2,000,000	7	78	1868 & 1871
do										1st " Bel. & Ill.	517,000	7		1873
Terre Haute and Richmond.....	Ind.	105	73	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	106	1866
do										1st Mortgage.....	3,400,000	7	98½	Aug. 1, 1866
do										2d "	2,500,000	7	81½	Nov. 1, 1871
do										Mort. Coupons....	94,049	7		1860 to 1866
Terre Haute and Richmond.....	Ind.	105	73	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	106	1866
do										1st Mortgage.....	3,400,000	7	98½	Aug. 1, 1866
do										2d "	2,500,000	7	81½	Nov. 1, 1871
do										Mort. Coupons....	94,049	7		1860 to 1866

below a prismatic compass, which was used to observe the apparent azimuth of a fixed mark: the bar was then reversed in length, and the observation was repeated in that state.

The number of experiments was 21. They were varied by reference in the succession of positions of the bars, difference of time allowed for rest, difference in the violence of the blows, &c.

The principal results appear to be the following:

1. The greatest amount of magnetism which a bar can receive, appears to be such as will produce (on the average of bars) a compass deviation of about 11 degrees, the bar being 5 inches below the compass. It was indifferent whether the bars rested on the stone or on wood, or whether they were struck with iron or with wood, the bars lying on the dip plane while struck.

2. When the bars, thus charged, lay on the plane transverse to the dip, they lost about one-fifth of their magnetism in one or two days, and lost very little afterwards.

3. When the charge of magnetism is smaller than the maximum, the diminution in a day or two is nearly in the same proportion as for the maximum.

4. The effect of violence on the bars, when lying on the plane transverse to the dip, is not in all cases to destroy the magnetism completely, sometimes it increases the magnetism.

5. The Cold-Rolled iron receives (under similar violence) or parts with (under similar violence) a greater amount of magnetism than the Hot-Rolled Iron, in the proportion of 6 to 5.

6. There is some reason to think the Hot-Rolled Iron has a greater tendency to retain its primitive magnetism than the Cold-Rolled Iron has.

7. There is some reason to think that, when lying tranquil, the Hot-Rolled Iron loses a larger proportion of its magnetism than the Cold-Rolled Iron loses in the same time.—*Proc. Royal Society, May 15. 1862.*

GOLD AND CURRENCY.

The question of gold and currency is ably argued in the Report of the Secretary of the Treasury. Mr. Chase says:

"It is true that gold commands a premium in notes; in other words, that to purchase a given amount of gold a greater amount in notes is required. But it is also true that, on the suspension of specie payments and the substitution for coin of the United States notes, convertible into six per cent. specie bonds as the legal standard of value, gold became an article of merchandise, subject to the ordinary fluctuations of supply and demand, and to the extraordinary fluctuations of mere speculation. The ignorant fears of foreign investors in National and State bonds, and other American securities, and the timid alarms of numerous nervous individuals in our own country, prompted large sacrifices upon evidences of public and corporate indebtedness in our markets, and large purchases of coin for remittance abroad or boarding at home. Taking advantage of these and other circumstances tending to an advance of gold, speculators employed all the arts of the market to stimulate that tendency and carry it to the highest point. This point was reached on the 15th day of October. Gold sold in the market at a premium of 37½ per cent."

The Secretary claims that this remarkable rise in the premium on gold is not due to the

increase of National currency, for three reasons:

"First: The whole quantity of circulation did not at the time greatly, if at all, exceed the legitimate demands of payments. On the 1st day of November, 1861, the circulation of United States notes, including credits to disbursing officers and to the Treasurer of the United States, was \$15,140,000. On the 1st day of November, 1862, it was, with like inclusions, \$210,104,000. Of corporate notes, on the 1st of November, 1861, the circulation in the loyal States was, according to the best estimates, \$130,000,000; on the 1st of November, 1862, it was \$167,000,000. The coin in circulation, including the coin in banks, was probably not less, on the 1st of November, 1861, than \$210,000,000. On the 1st of November, 1862, the coin had been practically demonetized and withdrawn from use as currency, or as a basis for currency, and is therefore not estimated. The aggregate circulation of the loyal States, therefore, was, at the first date, \$355,140,000, and at the second only \$377,104,000.

"Secondly: The whole, or nearly the whole, increase in the volume of the currency which has taken place was, it is believed, legitimately demanded by the changed condition of the country in the year between the two dates. The activity in business which, at the close of that year, had taken the place of the general stagnation which marked its beginning, and the military and naval preparations and movements which had vastly augmented the number and amounts of payments to be made in money, have, it is believed, legitimately demanded nearly or quite the whole of it.

"That such is the case may be reasonably inferred from the fact that the prices of many of the most important articles of consumption have declined or not materially advanced during the year. Wheat, quoted at \$1 38 to \$1 45 per bushel on the 1st of November, 1861, was quoted at \$1 45 to \$1 50 on the 1st of November, 1862. Prime mess pork on the 1st of November, 1861, was quoted at \$15 to \$15 50 per barrel, and on the 1st of November, 1862, at \$12 50 to \$13. Corn sold on the 1st of November, 1861, at 62 to 63 cents per bushel, and on the 1st of November, 1862, at 71 to 73 cents. A comparison between the prices of hay, beef, and some other staples of domestic produce at the two dates exhibits similar conditions of actual depression in price or moderate rise.

"Thirdly: It is, perhaps, still more conclusive against the theory of great redundancy that, on the 15th day of October, when the aggregate actual circulation, national and corporate, was about \$360,000,000, the premium on gold was 37½; whereas, on the 29th day of November, when the circulation had increased by more than fifteen millions, the premium on gold was 20 to 30 per cent."

The Secretary next proceeds to show that if there is any redundancy in currency, it is in the circulation of corporate banks, which have increased during the year from \$130,000,000 to \$167,000,000. While during the same period the deposits in the banks had increased from \$264,000,000 to \$344,000,000 and the loans from \$607,000,000 to \$677,000,000. Mr. Chase therefore concludes that so far from there being a redundancy in the National currency, there is still room for an increase in this element of the currency, without incurring the risk of increasing the price of gold from this cause.

COPPER MINES OF LAKE SUPERIOR.

We find in the *Detroit Commercial Advertiser* some very interesting statistics of the Copper Region of Lake Superior, gleaned from statements of parties who are well acquainted with the mines.

The aggregate product of the region for the year may be safely set down at 7,400 tons of copper, worth about \$4,000,000. The proportion of profits in this handsome sum, and which will be divided as dividends, will exceed have a million of dollars. The mines which have thus earned during this season are, for the Ontonagon district, Minnesota, National, Rockland and Evergreen Bluff; for the Portage Lake district, Quincy, Pewabic, Franklin and Isle Royale; for Point Keweenaw, Cliff, Central, Phoenix and Copper Falls.

The *Pennsylvania* is getting good results, from the northern section of the mine, in barrel and small mass copper, with a good amount of rich stamp stuff. The promises are that the lode will continue rich, both in its southerly continuation and in depth. The old vein of the *Ampygoloid* is earning some profit, producing some mass, and a fair per centage of barrel work and stamp rock, yielding about 1.5 ¢ c. The new vein has been opened and explored over a surface distance of about 900 feet, showing exceedingly well in heavy copper. The deepest shaft is down fifty feet, and from this was taken one mass of 4,700 lbs, and the whole ground was beautifully filled with small mass and barrel work. In fact, this is regarded as one of the most promising discoveries made on Lake Superior for the last fifteen years. This company has added, during the past season, sixteen new heads of stamps to the mill, which gives them a stamping power of thirty-two head, from which are produced some 2,200 lbs. of copper during each twenty-four hours of operation. The *Central* still continues to improve, and is emphatically a mass mine, rivaling the richness of the Minnesota and Cliff. The southern portion of the mine is now producing more mineral than any other workings in the same or different geological positions. This company have a stamp mill, producing about 1,500 lbs. of copper *per diem*. The *Copper Falls* exhibits no marked changes save it be in the improvement of the Owl creek "Ash Bed," on the ten fathom level. The *Phoenix* has a large mill running only on half time, (for the want of men,) producing nine tons of copper monthly. This mine confines its workings to the "Ash Bed." The *Cliff* continues to produce, on an average, about 137 tons of mineral monthly. A noteworthy and remarkable feature about this mine is the immense amount of large masses now exposed in the 140 fathom level.

The mines of Portage Lake have no new feature demanding notice. They all continue to look well, and have produced handsomely during the season. The *Huron* is opening the mine largely, and is about building a new stamp mill of some thirty-two heads of the old fashioned stamps. The new organization of the *Portage* are about commencing active operations on the old "Portage" vein.

The recent discoveries at the *Mesnard* are of the utmost importance and value, not only to the property immediately, but also to the whole district. The first mass yielded over 12½ tons pure copper. Around it were found indications of the operations of the ancient miners, in the shape of hammers and other tools, and charred wood.

In the Ontonagon district, at the *Bohemian*, a southern vein of great richness has been opened. The *Aztec*, *Adventure* and *Ridge* are now worked by tributaries with good results. The *Toltec* and *Ogima* are working a small force. The *Evergreen Bluff* is a small but well managed and productive mine. The *Knowlton* is a young mine of considerable promise. The *Superior* is working a deep adit, and sinking shafts for connections. The openings have yielded sufficiently to pay in the small way the workings that have been carried on. The *Rockland* is extending works upon the south (Minnesota) lode, and still continuing operations on the north lode. The product of the *Minnesota* has somewhat fallen off this year, but it still remains the leading producer of the district. The mine has paid \$1,540,000 cash in dividends. A very considerable amount of money has been expended during the present season in perfecting the shafts. The mine has now a depth of nearly 1,100 feet. The *National* has made important developments by opening a newly explored lode. The mine has fallen off somewhat in production during the past four months. Parties are working as tributaries with particularly good results on a property situated some five miles west of the *Minnesota*, belonging to Messrs. Coburn & Sales. The developments are looked upon in the country as being of much promise.

CURIOUS STATISTICS OF RAILWAYS IN ENGLAND.

It is estimated that the Railways in England, Ireland, and Scotland annually carry six times in number the population of Great Britain. It is an average day's work of its railways to carry 500,000 passengers, 258,000 tons of minerals and merchandise, 35,000 live stock, 1,000 dogs, and 740 horses. The trains, passenger and goods trains added together, traveled 2,807,748 miles more in 1861 than in 1860, which is equivalent to going round the world 116 times more last year than in the year before. 3,881,990 trains ran in the course of the year; that is to say, upwards of 10,000 a day, or more in a day than seven times the number of minutes in the day. If the trains had been equally distributed, running night and day without ceasing, they would have traveled among them 200 miles in every minute. The length of the line open increased by 436 miles and became 10,869; and the gross receipts of the year £28,563,355, considerably exceeded the interest of the national debt, and amounted to about 8 per cent. on the capital. The total raised by shares and loans increased from £348,130,127, at the end of 1860, to £362,327,338, an increase of £14,000,000 in the year. The working expenditure rose to above 18 per cent., and the net receipts only increased by about £180,000, or less than one per cent. on the increase of capital. The net receipts were rather over four per cent. on the capital. The accidents to passenger trains in which passengers were killed or injured were but 46 in number, causing the death of 46 passengers and injury to 781 more—one passenger killed or injured to about 320,000. In addition to this, 14 accidents were reported to the Board of Trade, in which no passenger was injured, and 20 passengers were killed through getting into or out of trains in motion, and 13 more through their own carelessness or want of caution. The number of passengers killed or injured, not through such rashness, but from causes beyond their own control, was—in 1858, 445; in 1859, 384; in 1860, 509; in 1861, 827. In the latter year the sum

of £135,062 were paid as compensation for personal injury. 128 servants of the companies, or of contractors, were killed in the year, 57 trespassers, and 17 persons crossing at level crossings.

It will be perceived by this last statement, that the injuries on railways, in proportion to the numbers using them, are much smaller than might be supposed. Taking the average of injured persons, the result is, that only one in three hundred thousand travelers is injured on British Railways in the course of a year. —*American Railroad Journal*.

THE PETROLEUM TRADE.

The rapid and extended use of petroleum has no parallel in the history of manufactures or commerce. It is but little over three years (August, 1859,) since petroleum was first obtained in any notable quantities in the valley of Oil Creek, Pa., and yet in that short period its employment for artificial illumination has spread over all parts of the civilized world and the distant islands of the sea. The obtaining of it from the oil wells, the refining of it, the carrying of it to market and the export of it abroad, combine to form a new manufacturing and commercial business for America, of great extent, which is the source of no small amount of wealth. Its rapid growth is proven by the fact that in the first nine months of 1861 the exports of it amounted to only 368,940 gallons, while in the same time in the current year they amounted to 6,294,819 gallons—an increase of no less than 5,925,879 gallons. From the 1st of January last up to the 7th of November, there was exported from the three ports of Boston, New York, and Philadelphia, 7,887,768 gallons, valued at \$2,040,750. Australia, China, New Zealand, and the West Indies, have received cargoes, but the greatest quantity went to Europe and no less than 4,101,437 gallons to Great Britain.

In a circular recently issued by A. Macrae, the great oil broker in Liverpool, it is stated that from the 1st of January up to the 18th of October last, there were received at Liverpool, of crude and refined petroleum, 200,000 casks, valued at \$3,000,000; this includes Pennsylvania and Canada petroleum. Crude American is now selling in Liverpool for \$100 per tun; it was selling in May last for only \$40 per tun. Benzine (the lightest refined oil) is in large demand. There is also a great demand for the heavy lubricating American petroleum. This circular says: "The oil exported from America and Canada in 1862 (the first year of its European introduction,) exceeded in value \$5,000,000. Yet, one tithe of its dissemination is not effected; Britain has manipulated pretty freely, so have France and the German States, but so clamorous are they for more that the export extension cannot be made sufficiently general. Spain, Portugal, Italy and Russia have yet to receive it in the crude form."—*Scientific American*.

NEVADA AND THE PACIFIC RAILROAD.—*San Francisco, Friday, Nov. 14, 1862.*—The Legislature of Nevada organized on the 12th. The Governor's message recommends that the Territorial Government take \$300,000 stock in the Central Pacific Railroad Company, which proposes to construct a railroad from Sacramento to Washoe. He says that during the past four months the people have paid nearly \$1,000,000 monthly for transportation of merchandise from California, and that railroad communication would reduce the freight tax

three-fourths, causing such developments that a road would pay from the increased business. From the best information attainable, the estimated monthly produce from the Nevada Mines is \$1,000,000, and they will hereafter produce as many millions as we can produce machinery and labor to work them, it being in the Governor's opinion the richest mine in the world, of incalculable extent and perfectly inexhaustible.

MONETARY & COMMERCIAL.

The past week has been as feverish as any of its predecessors. The almost certainty of a repulse to the National arms at Fredericksburg, had no tendency to increase confidence. People wonder how the Government can expect victory, or success, when they plainly give a month's notice to the enemy of the point where the next blow must fall. It is evident that if victory is to be gained, it can only be gained on the principle that has actuated all successful military commanders, to strike rapid, sudden blows and give the enemy as little time for preparation as possible. Money has been in fair demand, but owing to the abundance of unoccupied capital, rates have been easy at 10 to 12 per cent. Gold and silver have remained firm. Exchange is dull. Rates are as follows:

	Buying.	Selling.
New York.....	1/2 @ 1/2 dis.	par
Philadelphia.....	1/2 @ 1/2 dis.	par
Boston.....	1/2 @ 1/2 dis.	par
Baltimore.....	1/2 @ 1/2 dis.	par
Gold.....	31 prem.	33 prem.
Silver.....	25 prem.	26 to 37 prem.
Demand Notes.....	25 prem.	....
Kentucky notes.....	14 prem.	2 prem

The demand for Kentucky currency is wholly from cotton operators, and tends to withdraw it from circulation here.

Pork packing continues brisk, although the weather in the early part of the week was too warm. Prices have ranged from \$4.00 to \$4.55. The total receipts of the season foot up to 386,953 head.

General business has been quite active with an advancing tendency in prices.

Flour is firm at \$5.10 to \$5.15 for superfine. Wheat also firm at \$1.00, for Red, and \$1.10 to \$1.15 for White. Oats are firm at 64 cts. in sacks for old. Rye is dull at 60 cts. Corn is quoted at 45 to 46 cts. in bulk. Barley in good demand at \$1.34 to \$1.35, for Fall, and \$1.20 to \$1.25 for Spring. Hay is firm at \$14 to \$15.

The stock market, in New York, is dull, with a declining tendency. Operators seem to be waiting results of the war.

In California we notice a quiet market.

J. T. CRAPSEY,
ATTORNEY AT LAW,
—OFFICE—
N. W. Cor. Walnut & Sixth Street,
CINCINNATI.

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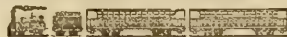
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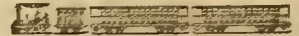
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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, DECEMBER 25, 1862.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

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A square is the space occupied by ten lines of Nonpareil.

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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	9.20 P. M.
Mail and Express.....	8.20 A. M.	6.20 P. M.
Columbus Accommodation.....	4.00 P. M.	11.05 A. M.
Morrow Accommodation.....	6.40 P. M.	8.05 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	8.00 A. M.	8.50 P. M.
Dayton & Sandusky.....	7.00 A. M.	6.45 P. M.
Dayton & Toledo.....	7.00 A. M.	11.40 P. M.
Richmond & Dayton.....	3.15 P. M.	1.50 P. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.55 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	8.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.50 A. M.
Eastern Night Express.....	10.00 P. M.	7.10 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	7.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.55 A. M.
Marietta & Cincinnati—		
Mail.....	7.45 A. M.	5.35 P. M.
Accommodation.....	3.30 P. M.	9.55 A. M.
Ohio & Mississippi—		
Mail.....	6.15 A. M.	10.00 P. M.
Express.....	7.00 P. M.	7.10 A. M.
Indianapolis & Cincinnati—		
Mail.....	5.00 A. M.	12.20 A. M.
Chicago Express.....	5.00 P. M.	10.40 A. M.
Dayton & Michigan—		
Toledo, Detroit & Chicago Exp.....	7.00 A. M.	11.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.55 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	8.00 A. M.	8.50 P. M.
Night Express.....	7.00 P. M.	8.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	7.30 A. M.	6.45 P. M.
Accommodation.....	6.00 P. M.	8.20 A. M.
Kentucky Central— (City time.)		
First Train.....	6.45 A. M.	10.37 A. M.
Second Train.....	2.10 P. M.	6.30 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

RAILROAD REPORTS.

We have often hitherto alluded to the subject of Railroad Reports, and urged the importance of giving early publicity to the practical results of the operation of our public works. Yet it can not be denied that each year shows a greater disinclination than the preceding one, on the part of the officers of some roads, to make a frank, open exhibit of their affairs—and each year the proportion of those failing to make such a statement seems to increase. Now as a Journal devoted to the interests of Railroads as a speciality, we feel it our duty again to put forth our views and to call loudly for Reports.

We are aware that there is an opinion prevalent among many Railroad Officers that the public have no more to do with the internal affairs of Railroads than they have with the details of the business of a private merchant. And for this reason they decline to give publicity to their business operations. This would be strictly true, if the ownership of Railroads were in the same shape as that of mercantile firms. Were they owned wholly by isolated individuals and bought and sold as individual property, upon inventory and the full personal examination of the purchaser, there could be no question as to the fact that the owner and the proposed purchaser alone were interested, and it would be needless to spread before the public the details of a business that could in no wise interest them. But Railroads are in no sense private property. They are public in their character. In their very inception they appeal to the public for the resources wherewith to build them. They next appeal to the public to sustain them. They seek from the public, rights and privileges as public conveniences, which they could not claim as private enterprises, and in return they accommodate public wants and supply public requirements. And lastly they rely upon the public for the market value of their stocks. We say then in no sense can enterprises be considered private, which originate with the public, are sustained by the public, and owned by the public. There is no man, however humble, but may, by the vicissitudes of business, be called upon to be a partial owner of such property as Railroad Stocks and Bonds, and thus become directly interested in the welfare or adversity of these enterprises. And when the occasion arises for these changes of ownership, there is neither time nor opportunity for an examination into the internal workings of the particular Railroad, whose stocks or bonds seek a change of owners.

This view of the case is so universally admitted, that we find when a road omits to make a clear, frank statement of its affairs to its stockholders and the public, it is safe to conclude that such an exhibit would neither be gratifying to the stockholders nor creditable to the managers. We could instance

numbers of cases, where such statement has been called for time and again, and when it did come, as come it must at some time, it overwhelmed with disgrace those who had withheld it.

But it is a needless task to pursue this subject farther. Railroad managers who desire the success of the enterprises entrusted to their care, universally admit the duty of rendering an account of their stewardship, and if stockholders regarded their interests with a jealous eye, as they should do, we should have no officers in charge of our public works, who did not fully fulfill their duties in this as well as other matters. We may hereafter take occasion to instance some roads who habitually fail to perform their duty. For the present, we shall content ourselves with a general call upon Railroad officers to favor us with an early copy of their reports.

HUNT'S MERCHANTS' MAGAZINE.

This valuable Statistical Journal has just completed its 47th Volume. Under the management of its present Editor, Mr. William B. Dana, it fully sustains the high character it acquired under the able conduct of the gentleman whose name it bears.

The present Number contains an able article on Federal Finances, considered with reference to the present issues of paper money—Articles on the Advanced Value of Gold—Hints as to the Development of our California China Trade. The American Jute, which has been so much relied upon as a substitute for rags in making paper, Norway and its Commerce, Bank Circulation past and present, together with a full Commercial Chronicle and Review of the month, a Journal of Banking, Statistics of Agriculture, Nautical Intelligence, Commercial Regulations and Mercantile Miscellanies.

The work is well worth the subscription price, which is but Five Dollars per annum. Communications should be addressed to Wm. B. Dana, 61 and 63 William st., New York.

SALT MANUFACTURE AT SAGINAW, MICHIGAN.

We give below some very interesting statistics of the salt manufacture in the neighborhood of Saginaw, Michigan, taken from the *Saginaw Enterprise*:

Four years ago salt making was but an imaginary thing in the Saginaw Valley. It was known that there was salt somewhere in this region, as various springs and wells indicated; but whether the brine could be found accessible in sufficient strength and quantity to warrant the manufacture, was merely a matter of conjecture. No drills, at that time, had penetrated the hundreds of feet of overlying rocks to reach the great deposits where nature or nature's Master had stored away such mines of wealth. There were enthusiastic individuals

who believed that this depository would some time be reached, and that salt making would some day become a practical thing. But the most enthusiastic had no conception of the facts, as now being developed. A year later, three years ago, the experiment was in progress by a few enterprising citizens of this city, aided by other parties interested here, who were trying to find the salt, if there was any worth finding. To Dr. George A. Lathrop, probably more than to any other one individual, is due the credit of calling public attention to the salt resources of this valley, and engaging capitalists and others in the experiment which has proved so successful.

A weak brine, found in an upper stratum of salt rock, while it encouraged them to proceed in their investigations, gave no positive assurance of success. It was not until reaching a depth of nearly 700 feet that the great subterranean salt works were fully reached, furnishing brine that afforded unequivocal proofs of strength and quantity.

But things have changed, and instead of a dubious experiment, we have now some forty salt works in operation, and nearly as many more in progress—each capable of supplying two blocks of fifty kettles each, or an equivalent in evaporating apparatus. They are located at various points along the Saginaw river, from its mouth to some distance above Saginaw City, some twenty-two miles, while others are in progress on the Cass river, Tittabawassee, and at Flushing, on the main branch of the Saginaw, over forty miles from the Bay; and even at the latter place brine has been found strong enough for manufacture; showing the great extent of the Saginaw salt basin.

The daily product of the wells and blocks now in operation is not less than two thousand barrels, worth at the wholesale prices which ruled just before the close of navigation, six thousand dollars. Allowing 300 running days in a year, the annual product, at this rate, would be 600,000 barrels, worth \$1,800,000. But the product in a year to come will be much more, from the fact that new works are every week or two coming into operation. It may be safely estimated that the amount manufactured for the year 1862 will amount to about one million barrels, worth from two to three millions of dollars.

We have not now time to enter into an estimate of the number of men employed, directly and indirectly, by the salt-manufacture; nor the various other manufacturing and commercial interests fostered by it. But any one can see that these must be very extensive. There are barrels to be made, wood to be chopped and hauled, machinery and kettles to be provided, vats and blocks to be built, docks extended to the river, salt to be shipped, and a hundred other things, all stimulating trade and industry in numerous ways.

Already the price of real estate, the whole length of the river and for miles each way, has

greatly increased. "Salt locations," by which is meant river front for shipment and grounds for wells, salt blocks, and other apparatus, are eagerly sought after and command high prices, as also does woodland situated within a few miles from the river, for supplying fuel.

DAMAGES FOR DESTRUCTION OF FRUIT TREES.

We find in the *Railroad Journal* a very interesting decision in regard to the liability of Railroad Companies for damage done by fires caused by locomotives. The case in point was that of *Whitbeck vs. the New York Central R. R.*, tried before the Monroe General Term of the Supreme Court of New York. The action was brought to recover compensation for injuries sustained by the plaintiff, by reason of the burning of his clover field and apple trees situated thereon, in the town of Pittsford. The fire originated at the track of the defendant's railroad in Pittsford, and was caused by the dropping of coals from the locomotive upon the dry grass on the track.

The question in the case was as to the measure of damages which should be applied in order to estimate the plaintiff's loss. The term Real Estate is defined in law to mean, not only the ground or soil, but the things which grow thereon, as trees, shrubbery, etc., and also buildings, as houses, barns, or any kind of edifice that may be erected upon any land. The defendant, therefore, contended that the true rule for estimating the damages was, the difference in the value of the land, before and after the fire. But the plaintiff maintained that the *fruit trees on the land* had a value separate from the ground on which they stood, and this value could be readily computed by competent witness; and for the purpose of fixing the amount of the injury done, this was the true rule.

Upon the trial at the Circuit, a witness for the plaintiff, in answer to the question, what, in his opinion, "these trees were worth upon that land?" said, "It depends upon the kind; I should think \$20 per tree; the way I estimate property generally is, what per centage it will pay over and above expenses; and trees of the age described, with six years heads upon them would pay from year to year the interest of more than twenty dollars a year; the fruit would be worth about 75 cents a barrel." This question was objected to by the defendant's counsel, on the ground that the trees were a part of the real estate, and the true measure of damages, so far as the destruction of the trees was concerned, was the difference in value of the lot, as a whole, in which the trees grew, before and after the fire; and also because the witness had no knowledge in regard to these particular trees. The Court overruled the objection. The judge charged the jury, that in arriving at the value of the damage, they were to use their own judgment upon all the evidence, and assess the value of the prop-

erty destroyed. That if the plaintiff was entitled to recover for the trees, he was entitled to their value on that land, at the time they were destroyed, together with interest on such value from the time they were destroyed. To this the defendant's counsel excepted.

The jury rendered a verdict in favor of the plaintiff for \$650, and the defendant appealed to the General Term, which now held that the true rule of damages in such cases is, that if the thing destroyed, although it is a part of the reality, has a value which can be accurately measured and ascertained, without reference to the value of the soil on which it stands, or out of which it grows, the recovery must be for the value of the thing thus destroyed, and not for the difference in the value of the land before and after such destruction. The following opinion was rendered at the decision of the case:

JOHNSON, J.—The only question in this case of any importance is in respect to the damages which the plaintiff was entitled to recover for the fruit trees destroyed by the fire. I am of the opinion that the judge at the Circuit was clearly right in instructing the jury that the plaintiff was entitled to recover the value of the trees as they stood upon his land, at the time of the fire, if he was entitled to recover at all. The object of an action of this kind is to obtain compensation for an actual loss; and this end is perfectly attained when the value of the thing destroyed is recovered by the owner. The defendant's counsel requested the judge to instruct the jury that the plaintiff could only recover the diminished value of the orchard lot, by reason of the destruction of the trees. This the judge refused, and I think rightly. It is true that the trees in question were real estate, and in one sense, part and parcel of the land itself. But so are buildings and fences, and grass, and trees of all kinds while growing upon the land. The true rule I conceive to be this: that if the thing destroyed, although it is part of the reality, has a value which can be accurately measured and ascertained, without reference to the value of the soil in which it stands, or out of which it grows, the recovery must be for the value of the thing thus destroyed, and not for the difference in the value of the land before and after such destruction. And it can make no difference in this respect, whether the action is brought to recover for the destruction of a single tree, or all the trees in an orchard. There is no intricate difficulty, as I conceive, in estimating the value of a fruit tree growing upon land, although it has strictly no commercial value as a tree, independent of the land which sustains it. In this respect, however, it does not differ materially from buildings and other fixtures. But it does differ from trees which are usually converted into timber, or fire wood, and which are frequently sold as they stand, for that purpose, or nursery trees which are grown for market. The difference is this: In the one case the value consists chiefly in the thing itself, as a convertible and marketable commodity, while in the other, the value consists chiefly in the quality and quantity of its average annual products, and it is capable of being leased, as much as a field or a dwelling. The calculation by which the value would be determined in the two cases would be somewhat different, but for aught I can see, it could be determined by the opinion of competent witnesses in the one case as well as in the other.

The objection to proving the value of the trees in question by the opinion of the witness, Cook, was not, I think, well taken, if the witness was competent to give an opinion upon the subject. It was objected by the defendant's counsel, that the witness had no knowledge of these particular trees, and was, therefore, incompetent, even if opinion was competent evidence by which to establish value.

The witness was shown, I think, to be qualified to express an opinion on the subject. He lived in the same town, was a nurseryman, and well acquainted with the fruit business, and had heard the plaintiff testify in relation to the kind, quality and product of the trees, but had no particular recollection of the orchard, although he thought he had seen it.

It was not necessary that he should actually have seen or been familiarly acquainted with the trees in question. It was enough that he was acquainted with the fruit business in that neighborhood, and the value of similar property there. He was, I think, as competent to express an opinion in respect to the value of trees, after learning from other witnesses what kind of trees they were, and the quality and amount of fruit yielded by them generally, as he would have been to express an opinion as to the value of the fruit per barrel, after ascertaining its condition and quality. The opinion, perhaps, would not be as satisfactory in the one case as in the other, but if it was competent as evidence, that is enough.

I am of the opinion that there was no error either in the charge, or in the refusal to charge as requested, or in the rulings upon the trial, and that the judgment should be affirmed.

Judgment affirmed.

ANNUAL MEETINGS IN JANUARY.

The following Companies hold their annual meetings in the month of January ensuing:

NAMES OF COMPANIES.	PLACE OF MEET'G.	DATE.
Boston & Providence R. R.	Boston, Mass.	Jan. 8th.
Cleveland & Mahoning.	Cleveland, O.	4th Wed'sday
Cleveland & Pittsburgh.	"	Jan. 7th.
Cleveland, Columbus and Cincinnati.	"	Jan. 9th.
Connecticut River.	Springfield, Mass.	3d Wed'sday.
Dubuque & Pacific.	Dubuque, Iowa.	"
Delaware.	Dover, Del.	Jan. 9th.
Fitchburg.	Boston, Mass.	Last Tuesday.
Galena & Chicago Union.	Chicago, Ill.	"
Greenville & Miami.	Dayton, O.	1st Monday.
Indiana Central.	"	"
Lehigh Valley.	Philadelphia, Pa.	Jan. 13th.
Little Schuylkill Navigation, R. R. & Coal Co.	"	Jan. 14th.
Lowell & Lawrence.	Lowell, Mass.	1st Monday.
Milwaukee & Horicon.	Milwaukee, Wis.	1st Wed'sday.
Minnesota & Pacific.	St. Paul, Minn.	"
North Pennsylvania.	Philadelphia, Pa.	Jan. 15th.
Norwich & Worcester.	Norwich, Conn.	Jan. 6th.
Philadelphia & Trenton.	Philadelphia, Pa.	2d Monday.
Philadelphia, Wilmington & Baltimore.	"	Jan. 2th.
Pittsburgh, Ft. Wayne & Chicago.	Pittsburgh, Pa.	"
Providence, Warren & Bristol.	Providence, R. I.	Jan. 28th.
Sandusky, Mansfield & Newark.	Sandusky, O.	3d Wed'sday.
Terre Haute & Richmond.	Terre Haute, Ind.	1st Monday.
Westchester.	Westchester, Pa.	3d Monday.

The above are all the Companies in the loyal States that we have on our list as holding meetings in the month of January. We presume that there are a few others whose names are not on our list. We would feel under many obligations to Railroad Officers who may notice omissions in the list, if they will notify us of them.

Will the officers of these companies please forward us their published reports at as early a day as practicable.

BALTIMORE & OHIO RAILROAD.

A much needed improvement has just been made by this Company at their station in Baltimore. The freight depot at the Camden station, some time since partially destroyed by fire, has been replaced by a substantial new structure, superior in every respect to the old one. It is enclosed on the west side, so as to exclude all persons not having business with the agents of the Company. A large number of workmen have also been employed for some time past, and have nearly completed a fence around the entire depot, with gates at different points for the ingress and egress of the cars and vehicles. It was the intention of the company to enclose the depot ground as soon as the streets crossing it should be condemned, but there being little prospect at present of such an event happening, the improvement has been made in advance.

RAILROAD MISCELLANY.

The second week of December on the Illinois Central Road shows an increase of \$40,000 on the same week of last year.

The Michigan Central road earned the second week of December,

1862.	\$50,431 26
1861.	43,155 73
Increase.	\$13,276 23

The Rock Island Road shows a gain in the second week of December of \$4,200.

The following are the earnings of the Terre Haute and Alton Railroad:

	1861.	1862.
October.	\$74,189 21	\$118,597 56
November.	70,719 47	129,166 57
Total.	\$144,853 68	\$247,953 63
		144,858 98

Increase in 1862. \$103,094 65

The running expenses for the month of November were less than 40 per cent. of the receipts. The above earnings are at a rate ample to pay the interest on all the debt, and leave 7 per cent., and probably more, for the preferred stock, which is now selling at 40.

The Cleveland and Erie Road has declared a dividend of 3 per cent. for the past 6 months.

The Boston & Worcester railroad a dividend of 4 per cent., free of tax, payable Jan. 1.

At the meeting of the Cleveland and Pittsburgh Railroad, to be held at Cleveland on the 7th of January, action will be taken on the proposed agreement with the Pittsburgh, Fort Wayne and Chicago Railroad. The transfer books close Dec. 20, and reopen Jan. 20.

The financial and business year of the Philadelphia and Reading Railroad Company has just closed, with a coal business of 2,305,428 tons, against 1,630,322 tons for the previous year; being a difference in favor of last year of 675,103 tons, and a retirement to its sinking fund of the company's own bonds, mainly those of 1856, of the third mortgage, of over \$400,000. This has been one of the best, if

not the very best, year's business the Reading Railroad ever had. It is generally expected that there will be a dividend of scrip in January representing at least a part of these profits. Next year a cash dividend is confidently anticipated.

The Chicago and Alton Railroad earned for the week ending Dec. 15, 1862:

	1862.	1861.
Passengers.	\$ 9,676 00	\$ 4,945 10
Freight.	22,121 70	11,488 36
Sundries.	334 33	315 33
Total.	\$32,675 63	\$17,959 79
Increase in 1862.	15,330 84	
Total this month to date.	\$58,359 21	\$35,241 67
Total since Jan. 1.	\$1,107,023 03	\$1,054,416 14

The earnings of the Toledo and Wabash Railway Company for the second week of December were:

	1861.	1862.
Passengers.	\$3,215 36	\$4,472 10
Freight.	17,728 40	19,739 58
Total.	\$20,943 76	\$24,501 63
Increase.		3,557 92

The details of the earnings of the Galena and Chicago Union Railroad for Dec. 8 to 15, are:

	1861.	1862.	Inc.
Freight.	\$20,351 69	\$25,663 28	\$5,311 59
Passengers.	5,492 22	6,211 94	Inc. 729 12
Mails, &c.	1,100 00	1,250 00	Inc. 250 00
Total.	\$26,943 91	\$33,154 62	Inc. \$6,290 71

The approximate earnings of the Pittsburgh, Fort Wayne, and Chicago Railway during the month of November, ultimo, compared with the same period of last year, were as follows:

	1862.	1861.	Increase.	Decrease.
Freight.	\$26,965 01	\$20,909 32	\$35,055 69	....
Passengers.	106,173 77	80,752 68	25,421 09	....
Express.	2,571 41	3,577 57	....	\$2,006 16
Mails.	7,825 00	7,825 00	....	....
Rent of R.R.	7,083 33	7,083 33	....	....
Miscellaneous.	1,397 75	642 11	755 74	....
Total.	\$302,016 27	\$302,789 91	\$59,526 36	....

Earn from Jan. 1, to Oct. 31, 3,009,993 00 2,427,039 58 582,953 15

Total to Nov. 30...\$3,372,009 27 2,729,829 76 642,179 51

The Hannibal and St. Joseph R.R. propose to fund the coupons for a number of years on their bonds.

The Rome, Watertown and Ogdensburg Railroad (late Watertown and Rome) has declared a semi-annual dividend of 3 per cent, payable on and after January 15.

The public are cautioned against negotiating for the following described income bonds of the Terre Haute and Alton Railroad Company, which were lost or stolen in Wall street, this week: Nos. 460 to 464 of \$1,000 each; Nos. 1454, 1455, 1456, 1496, 1523, 1532, 1530, 1564, 1579, 1643 of \$500 each.

The New Jersey Railroad and Transportation Company are endeavoring to obtain the privilege of extending their line to Philadelphia, via the New Brunswick and Millstone Railroad to Delaware River.

The Boston and Providence Railroad has declared a semi-annual dividend of 4 per cent, free of Government tax, payable Jan. 1.

STATISTICS OF ILLINOIS FOR 1861.

A correspondent of the *Chicago Tribune* has obtained from the forthcoming Report of the Auditor of that State the following statistics of Illinois for the year 1861:

	1860.		1861.	
	Number.	Value.	Number.	Value.
Horses.....	590,963	\$22,359,202	625,242	\$21,064,118
N't Cattle.....	1,401,978	12,467,537	1,628,369	11,991,863
Mules and Asses....	36,271	1,843,271	39,278	1,768,530
Sheep.....	384,430	606,001	971,379	747,437
Hogs.....	1,530,256	2,745,915	2,196,581	4,032,674
Carriages & Wagons..	211,801	5,060,795	209,247	4,859,507
Clocks and Watches....	167,145	830,735	169,779	716,968
Pianos.....	3, 07	321,717	3,467	243,677
Goods & Merchandise.....		10,667,620		9,101,949
Bankers', Brokers' & Stock Jobbers' Property.....		6,798,247		2,000,011
Manufactured Articles.....		1,374,551		1,111,127
Moneys & Credits.....		16,023,789		16,351,843
Bonds, Stocks, Joint Stock Companies, etc.....		551,727		443,329
Unenumerated Property.....		11,553,713		11,549,953
Aggregate.....		92,684,879		\$3,630,435
Deduction.....		3,800,64		2,932,325
Total value taxable personal property.		88,884,115		80,720,918
REAL ESTATE.				
Railroad property..		12,085,472		11,843,722
Lands.....		189,286,247		197,401,697
Town Lots.....		79,771,868		41,454,142
Total Real Estate..		278,343,667		250,102,661
Total value of Real and personal property.....		367,327,742		330,823,479
State Tax Revenue		1,175,128.78		165,411.73
State School Tax..		734,455.49		661,676.93
State Int't Tax...		550,841.51		661,630.96
Total tax chargeable		2,460,425.77		1,488,705.65
Acres in cultivation, 1850—Wheat, 2,259,648.				Corn, 4,-
290,399. Other field products, 1,084,579.				
Acres in cultivation, 1860—Wheat, 1,963,328.				Corn, 4,-
119,620. Other field products, 1,033,073.				

The following exhibits the value of property in the State for a series of years, the rate of taxation and the gross amounts of State tax:

Year.	Total value of Property.	Rate of Tax.	State Tax.
1839.....	\$58,849,525	2 mills.	\$117,770.05
1840.....	58,752,168	2 "	117,821.28
1841.....	70,156,053	3 "	210,498.10
1842.....	72,603,424	4 "	290,408.08
1843.....	72,416,800	2 "	144,833.90
1844.....	73,767,765	2 "	151,475.53
1845.....	82,327,105	3 "	246,981.22
1846.....	88,815,403.43	4 "	311,118.60
1847.....	92,296,493.76	3 "	339,779.53
1848.....	102,132,193.97	3 "	370,232.07
1849.....	105,132,194.97	5.8 "	612,124.10
1850.....	119,898,336.37	5.8 "	702,076.17
1851.....	137,818,079.30	6.03 "	834,495.60
1852.....	149,291,805	6 "	909,472.87
1853.....	225,156,622	4.03 "	1,116,993.37
1854.....	252,736,508	4.94 "	1,279,089.87
1855.....	334,398,425	6.7 "	2,260,904.90
1856.....	349,951,272	6.7 "	2,368,741.31
1857.....	407,477,367	6.7 "	2,750,346.01
1858.....	463,140,321	5.7 "	2,789,429.90
1859.....	366,702,053	6.7 "	2,528,992.11
1860.....	367,227,742	6.7 "	2,460,425.55
1861.....	330,823,479	4.5 "	1,488,705.65

From 1825 to 1861 inclusive, the rate of taxation remained at 6.7 mills on the dollar. In 1851 the revenue tax was 5 cents on the \$100; the school and interest tax 20 cents each on the \$100, being a total of 45 cts. on the \$100.

The valuation of property has been greatly reduced, year after year, by the assessors, until at the present time, as will be seen by the appended table, it is most ridiculously low:

	1860. Av. value.	1861. Av. value.
Horses.....	\$37.84	\$33.69
Neat Cattle.....	8.74	8.05
Mules and asses.....	50.82	43.50
Sheep.....	1.19	1.02
Hogs.....	1.79	1.84
Carriages and wagons.....	23.92	23.22
Clocks and watches.....	4.91	4.22
Pianos.....	94.43	71.73

In 1860, pianos were valued at \$'23. In 1861, they are only worth on an average \$11.73! The valuation differs in different counties, which might be avoided.

The following table exhibits the value of personal property, town lots, lands and railroads for a series of years:

	Personal.	Town Lots.	Lands.	Railroads.
1856....	\$14,108,235	\$14,776,557	\$168,974,270	\$ 6,639,220
1857....	111,813,918	44,398,666	201,613,234	6,527,703
1858....	97,853,641	46,184,564	249,971,641	7,139,475
1859....	88,248,094	70,676,326	194,177,104	11,758,675
1860....	83,884,115	76,971,868	189,386,287	12,085,472
1861....	80,720,918	41,454,142	197,404,697	11,243,722
TOTALS.				
1856.....	\$347,916,272	1859.....	\$366,702,053	
1857.....	403,140,321	1860.....	367,227,742	
1858.....	407,477,367	1861.....	330,823,479	

ABSTRACT OF THE REPORT OF SECRETARY SMITH, OF THE INTERIOR.

GENERAL LAND OFFICE.

The demand for the public lands has continued to decline since my last report. The sales for cash have not produced a sum sufficient to pay the expense of our land system.

INDIAN AFFAIRS.

The report recites that most of the Indian tribes with which treaties have been made (excepting the tribes in Kansas) have manifested a restless and turbulent spirit, developed, in many instances, into open hostilities.

The Indian country south of Kansas, inhabited by the Cherokees, Chickasaws, Choctaws, and Seminoles, was occupied by the insurgents very soon after the commencement of the war. The Indians, overawed by a strong military force in their midst, and seeing no prospect of aid or protection from the troops of the United States, renounced their allegiance to the Federal Government, and made treaties with the insurgent Government. A large number of the Indians were organized into regiments and placed in the insurgent army. A portion of them, who refused to participate in this insurrectionary movement, attempted to resist it by force, but, after two or three engagements, were driven from the country. About 7,000, including women and children, fled to Kansas, and after great suffering, were saved from starvation by the Indian Bureau. During the last spring three regiments of the refugee Indians were organized under the directions of the War Department, with the expectation that they would be sent to the Indian country, and be aided by such additional forces as would be sufficient to protect them in their homes. They have since been detailed for military duties in some other portion of the country.

Of the Indian murders in Minnesota, the report says:

In the month of August last the Sioux Indians in Minnesota most unexpectedly commenced hostilities against the white settlers in their vicinity, and prosecuted them with a degree of cruelty and barbarity scarcely paralleled by any acts of Indian warfare since the first settlement of this country. Men, women and helpless children were indiscriminately slaughtered. Women were violated in the presence of their husbands and parents, and subsequently murdered; houses were burned, and every species of property destroyed or stolen. A large extent of country, in an advanced state of improvement, was rendered utterly desolate, and not less than 800 persons were butchered. The efforts to suppress the Indians are recited, and although it is commonly said that the war is at an end, the report

says: The Indians still have it in their power to break up all the white settlements and depopulate an extensive region of country, unless a large military force shall be kept there.

After a careful examination of all the data which the Indian bureau has been able to obtain, I am satisfied that the chief cause of this outbreak is to be found in the insurrection of the Southern States, and evidence is adduced to show that not only were the Indians incited by the Rebels to commit these outrages, but that in their incursions they were led by evil-disposed white men.

The condition of affairs produced by these Indian hostilities demands of Congress prompt legislation. The people of Minnesota have suffered irreparable injuries.

But the people of Minnesota ask not only indemnity for the destruction of their property, but they insist upon guaranties of future protection. This, they think, can be obtained only by the removal of the Indians to some point so remote from the settlements as to preclude the possibility of another attack. It may well be questioned whether the Government has not adopted a mistaken policy in regarding the Indian tribes as quasi independent nations, and making treaties with them for the purchase of the lands they claim to own. They have none of the elements of Christianity; they are within the limits of the recognized authority of the United States, and must be subject to its control. The rapid progress of civilization upon this continent will not permit the lands which are required for cultivation to be surrendered to savage tribes for hunting grounds.

The duty of the Government to protect the Indians and prevent their suffering for the want of the necessities of life should be fully recognized. They should be taught to earn their subsistence by labor, and be instructed in the cultivation of the soil. The Government should designate the place where they shall reside and afford them protection in the lands which are assigned to them for a home, and furnish them with such aid as, with the fruits of their own labor, will afford them an adequate support. They should be taught to rely on the cultivation of the soil for a subsistence, and that they can become independent only through their industry.

The object can, in my judgment, be best accomplished by the appointment of a board of commissioners, to consist of three persons, who shall make a personal examination of the country, and select suitable locations for the residences of the Indians, and have authority to purchase such claims or individual rights as may interfere with their occupation.

PATENT OFFICE.

The business of this bureau has exhibited increased activity the past year. During the year from October 1, 1861, to September 30, 1862, there were received 5,302 applications for patents, of which 3,522 were granted. In the same time 811 caveats were filed, and 29 applications for extensions were received, of which 18 were granted. Seventeen hundred patents remain in the office awaiting the payment of the fee which is due on delivery. The law specifies no time within which patents must be taken from the office. This causes a large accumulation for an indefinite period. The law should be amended in such manner as to require the applicants to take the patents and pay the fees within a specified time; or, upon failure to do so, to forfeit their right to the patent, as well as the fees paid.

The balance in the treasury to the credit of the patent fund on the 1st of October, 1861, was \$16,750 27. From that date until Octo-

ber 1, 1862, there were received in payment of patent fees, \$163,405 34; appropriated by Congress, \$50,855 48. During the same period there were expended \$182,753 88, leaving to the credit of the patent fund on the 1st of October, 1862, \$48,157 21.

THE EIGHTH CENSUS.

The work in its new detailed form is being prepared with all the rapidity consistent with correctness, and it will devolve upon Congress to direct its publication in such manner as to insure its greatest utility. Much of the work is now ready for the press, and no pains will be spared to have the whole completed at the earliest moment possible.

In the present condition of the country, it is difficult to state what sum may be required to complete payments to the marshals and assistants, or such of them as should be compensated, and to complete the work. There remains due and unpaid to marshals and assistants the sum of \$223,980, being for the most part due to officers in the insurrectionary States, and which was withheld on account of the known disloyalty of some, the uncertainty which existed respecting others, and the impossibility of obtaining the information necessary to enable the Superintendent to arrive at satisfactory conclusions.

I respectfully suggest the sum of \$50,000 as requisite for the completion of the census, leaving it to Congress hereafter to provide for the claims of the census-takers in the insurrectionary States.

On this service, at the present time, 110 persons are employed, including clerks, laborers, messengers, and watchmen.

The appropriations heretofore made to this service amount to..... \$1,637,600 00
Of which there has been paid to
Marshals & their assistants, \$1,064,432 03
For Clerk hire & contingencies 422,934 20—1,437,266 23

Leaving unexpended on the 30th September... \$139,533 77

AFRICAN SLAVE TRADE.

Continued efforts have been made, with much success, during the past year, to suppress the African slave trade. Several convictions have been obtained of prominent persons engaged in fitting out vessels for this traffic, and the lesson has been impressively taught that it can not longer be prosecuted with impunity.

The recent treaty made with Great Britain for the suppression of the slave-trade will do much to accomplish the object desired.

UNITED STATES COURTS.

The expenses of the United States Courts during the fiscal year ending June 30, 1862, were \$523,662 02, being \$204,337 50 less than the expenses of the previous year. The principal cause of the decrease of expenses is the suspension of the courts in the insurrectionary States.

PUBLIC BUILDINGS.

The large number of sick and wounded soldiers demanding attention at this point rendered it necessary, in the judgment of the Surgeon-General, to occupy the Capitol as a hospital during a portion of the time since the adjournment of Congress, and it was taken possession of for that purpose by order of the War Department.

An appropriation of the Capitol to military uses must necessarily cause injury to the building and defacement of the expensive decorations by which it is ornamented. I respectfully suggest that Congress should provide by law against its future occupation for any other than the purposes for which it was erected.

The Long Bridge over the Potomac River has been used as a railroad bridge during the past year, and been kept in repair by the War Department at a very great expense. The

structure is too weak to sustain the weight of heavy trains, and has several times given way under their pressure.

To obviate these difficulties, the Alexandria, Washington, and Georgetown Railroad Company propose to construct a new by the side of, and connected with, the present structure, to be occupied exclusively by the railroad track.

It is desirable that Congress shall, as early as possible, authorize the Company to construct the additional bridge proposed.

The northern portion of the Patent Office building remains unfinished. The estimated cost of completing it is \$60,000, and an appropriation for that purpose is recommended. This would complete the construction of the building.

CAPITOL EXTENSION AND NEW DOME.

The amount of available appropriation, when the work was resumed under the supervision of this department, was \$356,107 24. Of this there has been expended, up to Oct. 31, 1862, \$99,099 09, leaving an unexpended balance of \$257,008 15. This sum will be sufficient to continue the work until the close of the present fiscal year. An appropriation of \$300,000 will be necessary for the next fiscal year. The aggregate amount of all the appropriations made for the Capitol extension is \$6,283,621 74. It is estimated by the architect that additional appropriations, to the amount of \$600,000, will be required to complete the work. This would make the entire cost of the Capitol extension, when completed, \$6,883,621 74.

NEW DOME.

The work on the new iron dome has progressed with great rapidity, and will be covered in before the close of the year. The original estimate of the cost of the dome was \$945,000. The whole amount appropriated by Congress, up to the present time, is \$700,000. The expenditures, from the commencement of the work to the suspension, in May, 1861, were \$561,140 79; and since the resumption of the work, under the supervision of this department, to October 31, 1862, \$56,867 40, making an aggregate of \$618,008 28, leaving a balance of appropriation, at that date, of \$81,991 72. It is estimated that an additional appropriation of \$308,000 will be necessary for the completion of the work. This will make the aggregate cost \$900,000, being \$45,000 less than the original estimate.

POTOMAC WATER WORKS.

It is estimated that the works may be completed by the 1st of July, 1863. The supply of water, at present, is obtained from Rock Creek, and is found to be entirely inadequate to the demands of the public buildings and the wants of the citizens. A full supply of water can not be obtained until the connection with the Potomac River shall be completed. The aggregate amount of appropriations heretofore made for the work is \$2,900,000. There had been expended, previous to the transfer of the work to this department, \$2,675,832 53, leaving a balance of \$224,167 47. Of this sum there was expended, under the direction of this department, prior to October 1, 1862, \$9,215 80. The balance then remaining on hand of \$214,951 67 is estimated to be sufficient to complete the work, so far as to procure a full supply of water from the Potomac, sufficient to meet every requisition. An appropriation of \$10,000 will be required for superintendence and repairs of the aqueduct during the fiscal year ending June 30, 1864.

THE PUBLIC PRINTING.

The public printing during the past year has been much greater than during any preceding

year. This increase has been occasioned not only by the unusual quantity ordered by Congress at the last session, but by the immense number of blanks required by the War and Navy Departments, and by the new bureau of Internal Revenue. The Government printing office has been managed with the utmost regard to economy practically, and the cost of printing to the Government has been the pay of the workmen employed and the cost of the materials used, thus saving the large profits heretofore made by the public printer under the former system of doing the public work.

WASHINGTON AND GEORGETOWN RAILROAD CO.

This important work has been completed in a substantial manner, and is now in successful operation.

HOSPITAL FOR THE INSANE.

The duties devolved upon this institution have been discharged during the past year with great fidelity and success.

On the 30th of June, 1861, there were under treatment 180 patients—108 males and 72 females. During the year ending June 30, 1862, there have been admitted: from the army, 139; from the navy, 15; from civil life, 18 males and 12 females, and from the soldiers' home, 1—making a total of 185.

The number of patients discharged during the year was: recovered, 95 males and 8 females; improved, 15 males and 1 female; died, 24 males and 10 females—making a total of 153.

There remained in the institution, June 30, 1862: from the army, 75; from the navy, 15 from civil life, 56 males and 65 females, and one from the soldiers' home—making a total of 212.

During the past year important improvements have been made for the introduction of water to the building, which have cost about \$3,000. The Superintendent has completed these improvements from the ordinary funds, without asking any special appropriation.

The constantly increasing number of patients in this institution will require increased appropriations for their support.

COLUMBIAN INSTITUTION FOR THE DEAF AND

DUMB AND THE BLIND.

The number of pupils in this institution on July 4, 1861, was 35. During the last fiscal year 6 were received and 3 withdrew, leaving, on July 1, 1862, 38.

The new building, for which an appropriation was made by Congress at its last session, is now rapidly approaching completion. The directors request an appropriation to furnish the building with gas and bathing apparatus.

METROPOLITAN POLICE.

The police force consists of 1 superintendent, 10 sergeants, and 150 patrolmen; 121 are on duty in the City of Washington, 10 in Georgetown, and 20 in the County of Washington; 139 are on foot, and 21 are mounted.

The population of the District of Columbia, as shown by the census of 1860, is 75,080. The large number of transient residents in the District during the past year has swelled the population, during that period, to near, if not quite, 100,000.

The present police force is inadequate to the complete protection of so large a population, especially at a time when so many causes exist tending to breaches of the peace and violation of law. The Police Board of Commissioners recommend an increase of the number to 300. For the reasons in detail upon which the recommendation is based, reference is made to the report of the Board accompanying this report.

The Board of Police earnestly recommend an increase of salaries. The present compen-

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	48		\$	\$	\$	\$	\$							
Baltimore and Ohio.....	Md.	61	380	13,111,800	10,781,833	506,07	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do										"	2,500,000	6	95	1825	
do do										"	700,000	6	84	1860	
do do										"	1,124,500	6	90	1875	
do Washington Branch.....	Md.	20		1,650,000						"	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind	118		1,859,813	1,250,750	139,120	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7	55	1866	
do do										2d "	160,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	60	68	1,950,950	1,049,000	27,511	911,019	492,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	96		3,98,400	8,220,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	3,470,000	6	100	1854	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,452	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000				
do do										1st "	800,000		80	1861	
do do										2d "	800,000		64	1865	
do do										3d " S. F.	950,000			1875	
do do										4th " S. F.	1,365,000			1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,470,000	7	100	1865 & 1870	
do do										2d "	600,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.	222		In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,400,000				
do do										2d "	1,535,000				
do do										3d "	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d "	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194		2,897,750	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	101	Feb. & Aug.	
do do										2d "	3,600,000	7	77	Feb. & Aug.	
do do										2d "	2,000,000	6	31	May 1.	
Chicago and Rock Island.....	Ills.	81	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	105	1870	
Chicago, Burlington and Quincy.....	"	88	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	110	1873	
do do										" 2d " S. F.	813,000	8		1890	
do do										1st Mor. Chi. & Aur.	390,000			1867	
do do										2d "	303,000			1869	
do do										1st " Cent. Mil. Tract	397,000			1864	
do do										2d "	245,000			1868	
Chicago, Iowa and Nebraska.....		82		No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	105	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	950,000	7		1880	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
Cleveland and Mahoning	Ohio.	68		1,167,473	1,712,000	299,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,500				
do do										1st Mortgage.....	850,000	7	80		
do do										2d "	499,000	7			
do do										3d "	341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	42	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	860,000	7		1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7	96	1873	
do do										3d 2d Ex.....	1,165,000	7	81	1865	
do do										4th 3d Ex.....	1,154,000	7	73		
Cleveland and Toledo.....	Ohio.	69	148	3,343,800	3,850,670	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	359,000			1867	
do do										1st " " 2d Div.	263,000			1872	
do do										2d "	265,000			1862	
do do										1st " Tol. Nor. & Clev	521,000			1863	
do do										2d "	293,200			1864	
do do										Junction Income..	44,500			1862	
do do										C. & T. Income..	300,000			1864	
Cleveland, Columbus and Cincinnati..	Ohio.	145	135	4,746,100	519,000	4,201	1,255,003	644,888	Dec. 31, 1861.	1st Mortgage.....	519,000			1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	145	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000		106	1861	
do do										2d "	303,000			1862	
Columbus and Xenia.....	Ohio.	115	54	1,490,000	290,700	50,500	See L. Miami.			Dividend.....	272,700		100	1860 to 1860	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666	2,512,000					2d "	2,212,000	8			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	90	1875	
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000	7		1866	
do do										2d "	1,000,000	8			
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		966,031	1,219,100	249,668	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d "	181,000				
Galena and Chicago Union.....	Ills.	121		6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000		104	1862 & 1863	
do do										2d "	1,520,000			May 1, 1875	
Great Western	Ills.	175		1,600,000	2,391,000		435,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	64		400,000	No report										
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573							
Hannibal and St. Joseph.....	Mo.	206		1,041,086	10,551,000	220,346	996,907	512,933	Sept. 1, 1860.	Land Mortgage...	5,000,000				
do do										Mortgage Conv.....	1,354,000		542		
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	334,136	Aug. 31, 1860.	1st Mortgage.....	927,000	6	30	1873	
Hudson River.....	N. Y.	77	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	118	1869 & 1870	
do do										2d S. F.	2,000,000	7	114	1870	
do do										3d "	1,840,000	7	1014	1875	
Illinois Central.....	Ills.	78	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000	7	109	1869	
do do										Construction.....	12,685,000	7	100	1875	
do do										"	4,115,000	6	97	1875	
do do										Debentures.....	42,740	7	96		
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000	7			
do do										2d "	578,000	10			
do do										Income.....	38,700	11			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000	7		1866	
do do										2d "	400,000	7			
do do										Real Estate Mort..	200,000	7	90		
Indianapolis, Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	1st Mortgage.....	649,984				
do do										2d "	314,000				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report								
Iron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock	Lot of R. d.	Capital paid in.	Total Funded Debt.	Outstanding Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.
Iron Mountain.....	Mo.	86 1/2		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,010	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,015,907	881,000	.....	302,006	122,797	Dec. 31, 1860.	1st	249,000	7	75	1861
do										2d	392,000	7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.		99	Sold out under mortgage	2,930,000	337,532	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st	260,000	7		
do										2d " Conv.	1,000,000	7		
do										3d	600,000	7		
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiver.						1st Mortgage E. D.	904,000		89	
do										2d " E. D.	1,000,000			
do										1st Land Grant W D	4,000,000		21	
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report		June 30, 1861	1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.		29	514,433	130,000		103,944	43,267	Jan. 1, 1862	1st Mortgage.....	1,300,000	6		1883
Little Miami.....	Ohio.		63	1,169.59	384,519		1,330,650	529,981	June 30, 1861	City Loan.....	174,000			
Louisville and Frankfort.....	Ky.		63				245,910	98,679		1st Mortgage.....	218,000			
Louisville and Nashville.....	Ky.		268	5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st ..	2,000,000	7		
do										1st " Lebanon Br.	400,000			
Louisville, New Albany and Chicago..	Ind.		288	2,800,000	3,000,000	200,000	645,827	371,402		1st " Memphis Br.	500,000			
do														
Madison and Indianapolis.....	Ind.		87	1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861
Marietta and Cincinnati.....	Ohio.		203	8,561,213	196,468	102,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868
do										2d	2,000,000	7		
do										3d	1,500,000	7		
do										Sterling Income...	333,000	4		
Michigan Central.....	Mich.		90	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	Domestic	928,617			
do										1st Mortgage " Sterling	467,483	6	98 1/2	1872
do										1st " Conv.	500,000	8	84	1869
do										1st " unconv.	250,000	8	96	1860
do										1st " Dollar Conv.	2,500,000	8	106	1869
do										1st " S. F. Conv.	4,153,000	8	112 1/2	1862
Michigan South'n & North'n Indiana	Mich &		39 1/2	9,018,200	9,714,764	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. S.....	991,000		108	1860
do										" Nor. Ind.....	983,000		103	1861
do										" Goshen Line.	1,168,000		100	1869
do										S. F. Toledo	2,500,000		11 3/4	1885
do										2d Mortgage	2,405,000		93 1/2	1877
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d	200,000	7		
Milwaukee and Horicon.....	Wis.		42	1,101,200						1st Mortgage.....	420,000	8		
do										2d	600,000	8		
Milwaukee and Prairie du Chien.....	Wis.		192	4,944,000	2,556,000		683,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	104	1891
Milwaukee and Western.....	Wis.		71	No report										
Mississippi and Missouri.....	Iowa,		35	No report						1st Mortgage Conv.	1,000,000	7	96	
do										2d " S. F.	400,000	8		
do										Oskaloosa Div.....	1,425,000	7		
New Jersey.....	N. J.		34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Land Grant.....	7,000,000	7		
New Jersey Central.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860	Mortgage.....	711,000		109	
New York and Erie Pref.....	N. Y.		94 1/2	Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860	1st Mortgage.....	3,000,000		106	
do			62							2d	4,000,000		110	
do										3d	6,000,000		107	
do										4th	4,900,000		101	
do										5th	1,792,500		97	
New York and Harlem Pref.....	Conn.		50	5,717,100	6,055,752	.....	1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	109 1/2	1873
do										2d	1,000,000	7	105	1864
New York and New Haven.....	Conn.		21	3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	7	94	Dec. 1, 1861
do										"	975,000	6		
New York Central.....	N. Y.		103 1/2	24,000,000	14,613,005	none.	7,309,042	2,661,132	Sept. 30, 1861	Cons. Cert. to St. H.	7,923,000	6	105	Oct. 1, 1875
do										Mortgage.....	3,000,000	7	115	May 1, 1875
North Central.....	Md.		138	2,260,000	5,890,300	557,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,000,000	6		June 15, 1864
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,450,000	6		1865
Ohio and Mississippi, Eastern Div.....	Ohio & Ind		192	Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500			
do										3d	316,945			
do										Construction.....	4,637,920			
do										Income.....	3,591,183			
Ohio and Mississippi, Western Div....	Ills.		148	.....	3,202,403		No report		Sept. 30, 1866.	State Loan.....	7,000,000			
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627		" " S. W.....	2,000,000	6		
do										Construction.....	4,500,000	6		
Pennsylvania.....	Pa.		359	13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,900,000	6	104 1/2	1888
do										2d	2,319,000	6	98 1/2	1875
do										3d " Sterling.	1,957,440	6		1875
do										State Works.....	7,200,000	5	89	
Peru and Indianapolis.....	Ind.		74	1,100,000	820,000	80,000	No report		Oct. 31, 1860.	1st Mortgage.....	2,300,000	6	90 1/2	1884
Philadelphia, Wm. and Baltimore.....	Del.		98	5,600,000	2,300,000		1,236,597	471,712		Improvement.....	119,000	6		1863
do										1st Mort. O. & P.	1,000,000	7	107	1865
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		51	467	10,192,453	1,757,273	2,335,363	761,555	June 30, 1861	2d "	750,000	7	93	1866
do										1st " O. & I.....	1,000,000	7		1872
do										2d "	280,000	7		1873
Pittsburgh and Connellsville.....	Pa.		49	1,755,896	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000			
Racine and Mississippi.....	Wis.		101	2,705,720	1,417,900	1,065,338	220,850	68,438	May 10, 1861.					
do														
Sandusky, Dayton and Cincinnati..	Ohio.		170	2,697,000	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1866
do										"	997,000	7		1866
do										"	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.		125	818,770	1,385,200	132,063	155,924	31,167	Dec. 31, 1860.	1st Mortgage.....	1,390,000	7		1860
do			56	404,975	500,000	100,000	110,200	53,100						
Springfield, Mt. Vernon & Pittsburgh..	Ohio.		50	1,000,000	1,050,000	200,000				1st Mortgage.....	500,000			
do										2d	450,000			
Stuebenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d	900,000	7		1865
Terre Haute, Alton and St. Louis.....	Ills.		208	No report						1st Mortgage Conv.	1,000,000	7	100	1862
do										2d " Conv.	2,000,000	7	78	1868 & 1870
do										1st " Bel. & Ill.	517,000	7		1873
Terre Haute and Richmond.....	Ind.		105	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	200,000	7	106	1866
do			35	2,123,506	5,996,949	52,389	233,546			1st Mortgage.....	3,400,000	7	92 1/2	Aug. 1, 1865
do			80							2d	2,500,000	7	81 1/2	Nov. 1, 1878
do										Mort. Coupons....	98,000	7		1860 to 1865

sation is for the sergeants \$600, and for the patrolmen \$180 per annum. This is below the rate of compensation paid other officers of the Government whose duties are less laborious and responsible than those of the police.

PENITENTIARY.

Since the adjournment of Congress, the accumulation of arms and ammunition at the arsenal in this city rendered additional buildings indispensable for their preservation. Upon the recommendation of the Secretary of War, an order was made by the President, on the 19th day of September last, to remove the prisoners and surrender the Penitentiary buildings to the War Department, to be used as an arsenal. In compliance with this order, I made arrangements with Amos Pillsbury, Esq., Superintendent of a Penitentiary at Albany, in the State of New York, to receive the prisoners and subside them until the expiration of their several terms of service, or until Congress shall make some provision for their confinement elsewhere.

The convicts at Albany are all employed in the business of shoemaking. The number of convicts sent to Albany was 131. The cost of their subsistence there will be \$1.25 each, per week. The expense of supporting them at Albany will be less than the cost of sustaining the Penitentiary in the District.

It is recommended that a law shall be passed by Congress sanctioning the transfer of the prisoners, and authorizing the confinement in the Penitentiary at Albany, or in some other prison out of the District, all persons who may be convicted in the District, until a suitable prison shall be erected.

The appropriations for the support of the Penitentiary of the District for the present fiscal year amount to \$30,123.75. An appropriation of \$20,000 is recommended for the next year for the support of the prisoners transferred to Albany, and for the removal and support of such as may be hereafter convicted.

It is gratifying to observe the evidences of increasing prosperity which are visible in the District of Columbia. It should be the policy of Congress to give encouragement to the enterprise which produces this prosperity, and, by liberal legislation, to advance the growth and improvement of the capital of the nation.

I have the honor to be, very respectfully,
your obedient servant,

CALEB B. SMITH, Secretary.

The President.

ATLANTIC AND GREAT WESTERN RAILROAD.

We have frequently alluded to this enterprise, although we have never been favored with a copy of the Company's Report. The following, taken from the *London Times* and *London Money Market Review*, gives the latest that we have seen published in regard to the Company. The *Times* says:

A private subscription is in course of completion for £562,500 first mortgage bonds of the Atlantic and Great Western Railway Company—an American undertaking which, through the support of Spanish capital, has been uninterruptedly carried forward without disturbance from the war or any other circumstance. This line is to complete a link which will establish direct communication between New York and the West without break of gauge, but its chief peculiarity which has attracted notice in Europe is that it communicates by a short branch with the center of the Pennsylvania oil districts, and promises to

command the whole of that traffic, and greatly to facilitate and cheapen the transit of the oil for shipment. The entire length of the work will be 378 miles, and the whole is expected to be completed next year, but the construction takes place in sections, as it passes through the States of New York, Pennsylvania, and Ohio. The New York section—48 miles, commencing at a point of the Erie Railroad at a station termed Salamanca—has been for some time in operation, and an issue of debentures for £225,000, secured on that portion, has already taken place. The present issue is to be secured by the Pennsylvania section of 88 miles, which opens up the oil region, and the third and last issue of £900,000 on the 242 miles which are to constitute the Ohio portion is not to be made until after two years from this date. The entire share capital is £1,750,000. There seems to be no doubt as to the extent and importance of the traffic which the line must control, and the net receipts even on the portion already opened are stated far to exceed the amount required for the interest on the debentures, while in addition the Company are to have a bonus from the Erie line of about ten per cent. on all the traffic they may bring to it. Under the circumstances, the value of the investment must apparently depend on faithful management, and on the probabilities in that respect each person must inquire and judge for himself. The present state of American currency and politics has not necessarily any serious influence either on the actual condition or future prospects of such of the railway lines in that country as are distant from the seat of war, since the depreciation of the currency can be met by an increase of charges, and the check to the growth of population is compensated by the check also imparted to the introduction of rival schemes. Thus far the Spanish capitalists and others interested profess themselves entirely satisfied with the spirit and manner in which every part of the undertaking has been carried out; and, in order to insure regularity of provision for the interest and sinking fund on the bonds issued in the London market, it is stipulated that the first earnings of each half year, as well as the whole of the Erie bonus, are to be paid, until they reach the requisite amount, to Messrs. Brown Brothers & Co., of New York, to the credit of Messrs. Samuel Gurney, J. P. Kennard, and Charles Mozley, as trustees in England. The interest, which is to be at the rate of £14 for each bond of £225, is to be paid in sterling in London, and the sinking fund is to be of an amount that will cancel four per cent. of the bonds in London annually at par. The issuing price is to be seventy, and the legal contracts in connection with the arrangements have been superintended by Messrs. Freshfields.—*London Times*, Nov. 19.

ATLANTIC AND GREAT WESTERN RAILWAY. *New Issue of First Mortgage Bonds, Pennsylvania division.*—Our attention has been drawn to this investment and we have much pleasure in placing the following outline of facts before our investing readers. The Atlantic and Great Western Railway leaves the New York and Erie line at Salamanca, about four hundred miles west of New York, and from thence traverses a district rich in coal, petroleum and agricultural produce, terminating at Dayton, sixty miles east of Cincinnati, and forming the link of a continuous six feet gauge westward line from New York to St. Louis, of about 1,200 miles in length, of which the New York and Erie forms the Eastern, and the Ohio and Mississippi the Western extremities. The entire length of the Atlantic and Great Western line is 378 miles.

Of these, 190 miles from Salamanca to Mendville are now open; 100 miles further to Akron, with a connection at Cleveland, will be ready for traffic during this present month of November, while the line to Titusville and the oil regions has just been opened; and the branch to Franklin and the great coal fields will be opened in December, making together about 390 miles in operation by the close of the present year.

The capital at present raised is as follows:

New York—1st Mort. Bds., 7 per ct., 1880..	£225 0 0
Do. Shares.....	168,750
	£393,750

In addition to which the company is authorized to raise:

Penna.—1st Mort. Bonds, 7 per ct., 1877..	£562 500
Ohio—Do. Do.	900,000
	1,462,500
New York—Second Mort. Bonds.....	£180,000
Pennsylvania Do. Do.	225,000
Ohio Do. Do.	450,000
	855,000
Pennsylvania—Shares.....	£470 000
Ohio—Do.	1,125,000
	1,595,000

Further capital authorized.....£3,892,500

The number of miles completed, and about to be completed, being thus 300, and the capital raised only £393,750, it would appear that the cost per mile is little over £1,300. Of course this is impossible; and the explanation is that the contractors have accepted the second mortgage bonds in payment of the work performed, so that the public are not called on to find any money until the lines are ready for opening. This is an assuring fact. The £562,500 now about to be raised on the Pennsylvania first mortgage will, therefore, merely be used in payment for portions of the railway already constructed. In stating that the second mortgage bonds are not raised, it would, therefore, be more correct to describe them as not raised from the public. Should the whole of the authorized capital be raised it would amount, as already shown, to £4,286,250, or £11,339 per mile.

£393,750 having been, therefore, raised from the public, it is now proposed to raise the further sum of £362,500, or \$2,500,000, by the First Mortgage Bonds of the Pennsylvania division, the holders having a lien on the income and all corporate rights, privileges, lands, franchises, plant, and property of the Pennsylvania division of the railway, with a further guarantee by the New York and Ohio divisions, on the following terms:

1. The interest to be at the rate of 7 per cent. per annum, secured by a trust fund, and payable at a fixed rate of *four shillings per dollar* at the banking house of Messrs. Heywood & Co., London, half yearly in April and October, the trustees being Mr. Samuel Gurney, M.P., Mr. John P. Kennard, and Mr. Charles Mozley. The security, so far as the trustees are concerned, is thus unquestionable.

2. The bonds to be redeemable at par in fifteen years in New York or in London at *four shillings and sixpence per dollar*, and transferable without stamp or indorsement. Interest coupons attached to the bonds.

3. Four per cent. of the gross amount to be drawn yearly in January, to be paid off at par in London. This will be found a new and important feature in American railway securities. The official announcement of the issue of these bonds does not state whether these annually drawn bonds are to be paid off at four shillings or four and six pence per dollar; but as the final redemption at the expiration of fifteen years is to be at four and six pence, we assume that the annually drawn bonds will be paid off at the same rate. The redemption

of four per cent. of the total amount annually would amount to sixty per cent. during the fifteen years, leaving only forty per cent. to be redeemed at the expiration of that time; and this, according to our calculation, would reduce the average period for redemption of the whole, £562,500, to ten years and a half instead of fifteen. In the present condition of the market for American securities these bonds can, of course, be only issued at a considerable discount, and, therefore, the period fixed for their redemption at par is an important element in their value. Supposing, for instance, that these bonds are issued at 75, or 25 per cent. discount, it will make a vast difference to the holder whether he receives his 25 per cent. discount in ten and a half or fifteen years. The receipt of £25 in ten and a half years is at the rate of £2 7s. 6d. per annum, while it is only £1 13s. 4d. per annum when spread over fifteen years, a difference of nearly three-fourths per cent. per annum.

However, the one leading consideration with the investor should be the security afforded by the commercial prospects of the undertaking. The traffic receipts of the present year upon the sixty miles from Salamanca to Cory have been as follows:

1862.	Passengers.	Freight.	Total.
January.....	\$2,193	\$11,630	\$16,823
February.....	1,939	11,172	13,411
March.....	2,336	18,402	20,738
April.....	2,544	7,850	10,394
May.....	2,514	7,755	10,239
June.....	2,856	8,471	10,927
July.....	3,327	6,986	10,307
August.....	5,134	10,171	15,309
September.....	8,510	21,529	30,039
October.....	3,778	20,960	24,738
Total.....	\$36,700	.....	\$162,947

Computing the number of weeks to be 38, this traffic receipt would be at the rate of £965 per week, or £16 per mile per week—no great result if it is to be regarded as any indication of future revenue: but our experience of these matters, and of the gradual but sure increase of the traffic of railways, induces us to attach small importance to the undeveloped traffic of the isolated section of any railway a few months in operation. The large increase in the September traffic receipt is the result, it appears, of the partial opening of the Titusville branch to the oil districts, which has since that been completed. This beginning of the oil traffic augurs well for the future.

Some estimate of the future traffic receipts of the Atlantic and Great Western Railway may be formed from the facts that the receipts of the Erie line, into which the Atlantic and Great Western runs at its eastern end, are at the rate of £65 per mile per week; and that those of the Cincinnati, Hamilton & Dayton, into which it runs at its western end, are £48 per mile per week. Moreover, the receipts of the Lake Shore Railway, which runs parallel with the Atlantic and Great Western, but some 30 to 50 miles further north, and close to the shore of Lake Erie, are at the rate of £52 per mile per week. Upon these facts it may be fairly assumed that on the completion of this line and the full development of the traffic the mileage receipts per week will not be less than £50. This on the 378 miles would give a gross annual revenue of £982,800.

The *American Railroad Journal* of the year 1860, quoted by Mr. Kennard, the engineer of this railway, in a pamphlet of that date, gave the gross revenue receipts of the previous official year on 171 railways taken indiscriminately as \$96,356,970, and the net earnings as \$38,774,507. Deducting, therefore, the latter amount from the former we arrive at the average working cost of \$57,582,462, which bears the proportion of 60 per cent to the

receipts within a fraction. This of course includes good, bad, and indifferent railways, though we are told the working expenses of the chief lines are under 50 per cent. But we will assume that the Atlantic and Great Western is worked at the average rate, 60 per cent. Putting these figures together, we arrive at the following result:

Estimated gross traffic receipt, at £50 per mile per week, on 378 miles of railway.....	£982,800
Less 60 per cent on receipts for working expenses.....	589,680
Estimated net earnings.....	£393,120
First mortgage bonds, viz.:	
New York 7 per cent, already issued.....	£225,000
Penn. 7 " now to be issued.....	592,500
Ohio, say 7 " not issued.....	900,000
Total.....	£1,687,500—7p.ct. 118,125

Surplus after payment of first mortgage.....	£274,905
2d mortgage bonds, £355,000, say at 8 per cent.....	68,400

Surplus for dividend on shares..... £206,505

Since writing the above we learn that the price at which these bonds are to be offered to the public is 70 per cent, or 30 per cent discount, and it follows that, taking the period of redemption at ten and a half years, they will pay the investor about 12 per cent at that price, provided the company meets its engagements. We have stated fully the facts upon which we have based the foregoing estimates, and have endeavored to avoid altogether any florid speculations upon thousands of oil wells, the coal mines, and the rich agricultural districts through which the railway passes. These are, nevertheless, truths; but we prefer, in any estimate of the future, to protect ourselves by the experience of the past. The railway at both ends of the Atlantic and Great Western earn an average of £50 per mile per week and upwards, and the railway parallel with it does the same. The average cost of working railways in North America is 60 per cent on gross receipts, and we can not see any reason why this railway should not do the same. If it should, the bondholders of the first and second class will possess excellent securities. American Securities of most kinds are distrusted in this country, some of them justly; but if there is reason for the apprehension that the State creditor may not be hereafter fully paid, there is apparently no reason to suppose that the railway on its own freehold, in the midst of abundant corn fields, coal mines, and oil wells should fail to meet its engagements, provided those engagements are moderate in amount, and the railway be conducted honestly and with moderate prudence. These conditions are, we believe upon the facts before us, fulfilled in the case of the Atlantic and Great Western Railway.—*London Money Market Review*, Nov. 22.

MONETARY & COMMERCIAL.

The past week has been full of great events, which have had their full effect on the monetary and financial world. The failure to take Fredericksburg, although not so bad a disaster as had been expected by those who had watched the progress of events, had a depressing effect on Government securities, and the stock market, as a consequence, went down. The fact is, all men of common sense expected a disaster there, and are only surprised that it was not greater. No military commander of genius, or even ordinary ability, would advise his antagonist for a month beforehand, that in course of time he intended to cross a river and attempt to push his army beyond a position

naturally strong and capable of being made impregnable. No man, military or otherwise, of even common sense would risk his reputation for sanity, by giving his enemy a month's notice of such an intention. And yet such was exactly the case with the national army, in the attempted occupation of Fredericksburg. A large, well organized, and disciplined army march to the side of the river opposite Fredericksburg, the telegraph immediately announces to all the world that as soon as pontoons could be prepared, this great army would cross the river and march to "victory" on the road to Richmond. Before the dispatch, it was evident that this army intended to cross the river. But the obliging telegraph tells all the world, including rebellion, just how long they will wait before they attempt it. Immediately all rebellion is alive, every available force is brought to bear, fortifications are erected of formidable character, and every thing is prepared that skill or ingenuity could devise. When all is ready, this great army goes over the river—no effort is made by the enemy to dispute the passage. It pleases them better to cut off the retreat of the doomed band than to prevent them falling into the trap. And so they cross unopposed. They fight two days, lose ten thousand men, and then, in consequence of the energetic protest of two subordinate Generals, whose years and ability entitle them to higher rank, this great army suddenly retires to the opposite shore again, just in time to escape entire destruction. And yet the Commander of this great army coolly insists that had he been allowed to persist, he could have been victorious at the last. We submit that this experience should teach our government that it has had trial enough of inexperienced men, and for the future should find commanders for its grand armies from the old heroes who now occupy subordinate positions. Such men as brave old Heintzelman or Hooker have been overlooked too long, and younger men have been allowed to flesh their maiden swords at the head of great armies, while the veterans of thirty years have seen their blunders and grown disheartened for their country. The government must reasonably expect disaster so long as they pursue this course towards their Generals. The experiments in General-making have already cost two years of time, five hundred millions of money, and nearly a quarter of a million of lives. We submit that this has cost enough, and now for the future we believe the country demands the benefit of the experience of its veteran soldiers.

The threatened changes in the Cabinet, also, have unsettled public confidence. In our market, Quartermasters' certificates, which had been selling at 2½ to 4 per cent. discount, suddenly declined to 10 per cent, with no disposition to buy at that rate. The withdrawal of these resignations will probably in a measure restore the shakey, but nothing will so much tend to public confidence as the appointment

of able and experienced commanders over the armies.

Money is still abundant for good business paper at 10 per cent. Exchange is in good supply at former rates.

Buying.	Selling.
New York..... $\frac{1}{2}$ @ $\frac{1}{2}$ dis.	par
Philadelphia..... $\frac{1}{2}$ @ $\frac{1}{2}$ dis.	par
Boston..... $\frac{1}{2}$ @ $\frac{1}{2}$ dis.	par
Baltimore..... $\frac{1}{2}$ @ $\frac{1}{2}$ dis.	par
Gold.....31 prem.	33@34 prem.

A question having been raised as to the payment of the interest of the Government debt in Legal Tender Notes in place of coin, the following resolutions were introduced by Mr. McDougall, of the Senate Finance Committee, read twice, and referred:

Resolved by the Senate and House of Representatives of the United States, in Congress assembled, That this Government will maintain the payment of coin for interest on its indebtedness, and that they would consider it a breach of good faith to the public creditors to do otherwise.

Resolved, secondly, That the duties on Imports shall continue to be collected in coin and the old issue of demand notes only; and that when the latter shall not be obtainable for the purpose of such payment, they shall thereafter be payable only in coin.

The production of Postal Currency is now \$120,000 per day, of which the West has not received its full share.

Thompson's Reporter, after expressing the opinion that there is more gold now in the country by \$30,000,000 than before the civil war broke out, says:

It is not our province to attempt to account for the daily varying speculations in gold upon any other than material or sound financial causes, such as we have attempted to point out as practically against the high premium. Nor do we desire to arraign the movement itself, believing that it will ultimately find its proper level. The ground of confidence in our national circulation, as in our material resources and ability for the conduct of the war, may be shaken, as it has on several occasions been shaken, by reverses in the field; but it is also remembered that only eight months ago it was equally elated by our successes in the field, so that gold commanded only two or three, or at most five, per cent. premium. Should the tide of fortune in our present winter campaign turn as suddenly in favor of the Government, the effect will be such on the price of gold that no combination of speculators, however wealthy, whether of native or alien birth and sympathies, will be able to resist the fall.

Flour is dull at \$5.00 for superfine, \$5.10 and \$5.20 for extra, and \$5.30 to \$5.40 for family. Wheat dull at former quotations. Corn in fair demand at 46 cts. bulk to 57 cts. sacked. Oats firm at 53 to 54c. in bulk, and 63 to 64c. in sacks. Rye dull at 60c.

The Provision market is quiet. Mess Pork is quoted at \$10.75 for country and \$11.00 for city. Lard $8\frac{1}{2}$ to $8\frac{7}{8}$ and 9c. Clear Sides in fair demand at 7c. Shoulders firm at $4\frac{1}{2}$ c.

The weather has been too warm to be favorable for pork packing. Prices for hogs have ranged from \$4.25 to \$1.75, the average run being from \$4.45 to \$4.60. The total receipts for the week were 48,964, and for the season, 435,917 head.

NEW YORK CENTRAL R. R.

The Annual meeting of this Company was held in Albany on the 10th inst. From the Report there submitted we find the earnings of the last fiscal year were:

EARNINGS.	
Passengers.....	\$2,399,724 12
Freight.....	6,607,330 96
Other sources.....	359,772 69
Total.....	\$9,356,827 77

PAYMENTS.	
TRANSPORTATION;	
Passengers.....	\$4,485,616 63
Freight.....	4,122,133 70
Interest, including interest on	
delt. Certificates held for	
Sinking Fund.....	1,021,193 12
Sinking Funds.....	113,967 75
Rent of Niagara Bridge and	
Canandaigua R. R.....	60,000 00
Dividends, No. 17, Feb. 1, 1862,	
3 per cent.....	720,000 00
No. 16, Aug. 1, 1862, 3 per ct.	720,000 00
	1,440,000 00

Net earnings.....\$2,553,916 75
Increase of earnings of 1862, over those of 1861,
\$2,045,785.

The Capital Stock and Funded Debt of the road is as follows:

Capital Stock.....	\$24,000,000
Funded Debt.....	14,278,303
Total.....	\$38,278,303

The Company has no Floating Debt. The net earnings after expenses were deducted were over *ten per cent.* on the capital stock of the Company.

On receipt of the full report of the Company we shall publish a fuller statement.

HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

Carriage, Tire, Machine, Plow, & all kinds of

SCREW BOLTS,

Nos. 535 & 537 Central Avenue.
CINCINNATI.

BRIDGE BOLTS, Rivets of all sizes, Coach Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov. 27, 1y

Philadelphia, Wilm'gton & Baltimore

RAILROAD!



FOUR PASSENGER TRAINS DAILY!

RAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11, P. M., Express.
On Sundays at 3.30, A. M., and 11, P. M.
Leave Baltimore for the North and West daily, at 8.30, A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail; and 7.00 P. M., Express.
On Sundays at 7, P. M., only.
Through connections made for all points at the North, East and West.

WM. CRAWFORD, Agent.

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

Through Distance 280 Miles;

42 Miles Shorter than any other Route

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 8:00 A. M. 7:00 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnett House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without re-chilling or transshipment.

JOHN BRANT, JR., Superintendent

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

S. W. CHAPMAN, Gen. Freight Agent.

33 Randolph Street, under Sherman House, Chicago, Ills.

W. M. F. HEWSON,
STOCK BROKER,
No. 21 West Third Street,
CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and takes collections.

KNOX & SHAIN,
Engineering and Telegraphic
INSTRUMENT MAKERS,
218 WALNUT ST., PHILADELPHIA.
(Two Premiums 419 by Franklin Institute.)

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers
No. 67 West 6th St. bet Walnut & Vine
CINCINNATI O

BUSH & LOBDELL.
Chilled Railroad Car Wheel, Tyre,

—AND—
Railroad Machine Works,
Wilmington, Delaware,
MANUFACTURE

CHILLED WHEELS

TYRES,

FOR RAILROAD CARS

—AND—
LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

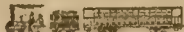
Either Single or Double Plate,
With or without Axles.

WHEELS FITTED

To Hammered or Rolled A

In the best Manner, at the Shortest Notice,
Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition.

The well-earned reputation of this Road for
SPEED, SECURITY AND COMFORT
Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore concealed to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg. Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest. Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$1.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Baltimore, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

**NEW YORK, BOSTON,
AND ALL EASTERN CITIES,**

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATHMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

feb 8. CHARLES MINOT, Gen'l Sup't

W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

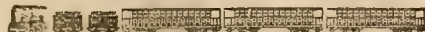
Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men the West that all work furnished by us shall be of the best quality in style, workmanship and material. Orders are respectfully solicited, with the assurance that they will be speedily and to the satisfaction of all.

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE.
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH to PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
ONE TRAIN RUNS DAILY (430 MILES.)
VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL PORTS AS LOW AS ANY ROUTE

SLEEPING CARS.
ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburg with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "PA. PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
D. A. STEWART, Freight Agent, Pittsburgh.
CLARKE & CO., Transfer Agents, Pittsburgh.
K. C. MELDRUM & CO., Madison, Indiana.
J. E. MOORE, Louisville, Ky.
W. W. ALKMAN & CO., Evansville, Ind.
R. F. SASS, St. Louis, Missouri.
CLARKE & CO., Chicago, Illinois.
W. H. & E. L. LANGLEY, Gallipolis, Ohio.
G. B. NEAL, Parkersburg, Virginia.
HALL & CO., Marietta, Ohio.
H. S. PIERCE & CO., Zanesville, Ohio.
McDOWELL & McCORM, Portsmouth, Ohio.
R. McNEELY, Maysville, Ky.
J. P. JOHNSTON, Ripley, Ohio.
JOHN TODD, Covington, Ky.
G. L. BEATON, Cleveland, Ohio.
K. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
L. H. HOUSTON, Gen'l Ticket Agent, Philadelphia.
H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	9:20 P. M.
Mail and Express.....	8:30 A. M.	6:20 P. M.
Columbus Accommodation.....	4:00 P. M.	11:05 A. M.
Morrow Accommodation.....	6:00 P. M.	8:05 A. M.

Cincinnati Hamilton and Dayton. RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	7:30 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	7:00 A. M.	11:40 P. M.
Cin. & Chicago Air-Line Ex.....	8:00 A. M.	8:50 P. M.
Dayton and Richmond.....	3:15 P. M.	1:30 P. M.
Day., Toledo & Detroit Huntsville.....	5:20 P. M.	10:35 A. M.
Cin & Chicago Air Line Ex.....	7:00 P. M.	8:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:50 and
Eastern Night Express.....	10:00 P. M.	7:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	5:00 A. M.	12:20 P. M.
Indianapolis and Terre Haute.....	5:00 A. M.	12:20 P. M.
Decatur, Springfield & Quincy.....	12:45 A. M.	4:45 P. M.
Chicago Night Express.....	5:00 P. M.	10:40 A. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	6:15 A. M.	10:00 P. M.
Louisville and St. Louis Night Ex.....	7:10 P. M.	7:20 A. M.
One through train for Louisville and St. Louis Sunday evenings.		

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES slower than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omni-buses call for passengers as usual.

P. W. STRADER,
General Ticket Agent L. M. & C. X., and C. H. & D Railroads.

W. H. L. NOBLE,
General Ticket Agent Indianapolis & Cincinnati Railroad.

E. F. FULLER,
General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,
OF EVERY DESCRIPTION.

No. 64 COURTLANDT RE
NEW YORK

ALBERT BRIDGES.

JOSEPH

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.
Tube CLEANERS, Steel Wire and Whalebone BRUSH-

Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enamelled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warm-
ing Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Piaz-
za Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.
Steel for Rolls, Dies, Tools, Cannon &c. &c.

THOS. PROSSER & SON,
28 Platt Street, New York

N. W. BALDWIN, MATHEW BAIRD.
M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of
LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned
THEODORE DEHON,
101 10 Wal Broadway, New York

EDWIN J. HORNER,
SUCCESSOR TO

McDANIEL & HORNER,



**LOCOMOTIVE & RAILROAD
CAR SPRING
MANUFACTURER,
WILMINGTON, DELAWARE.**

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being alike on both sides, impossible to unravel, and leaving no chain or ridge on the underside, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.
WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

—AND—

Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Spt. 2. MOSELEY & CO.

JAMES FOSTER, Jr. & Co.,
MATHEMATICAL AND PHILOSOPHICAL INSTRUMENT MAKERS,

S.W. CORNER FIFTH AND RACE,

Cincinnati, Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

H. TWITCHELL,

JAMES FOSTER, Jr.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase.
Ag. 4, m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,
Engine and Car Axles, Pump and Piston Rods
Bar of all Sizes,
And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works
June 9.

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

**COAL OR WOOD BURNING
LOCOMOTIVE ENGINES**

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works, being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, President.
WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

NORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1½ to 10 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from ½ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas, Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe, ½ to 24 inch diameter, and branches for same, &c., &c.
Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER,
THOS. T. TASKER, JR., S. F. N. TASKER,
BY G. MORRIS.

BUTLER'S

MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroads for the South and West. For sale by 1,000 leading Merchants and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, JANUARY 1, 1863.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$5 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by *tenths* of Nonpareil.

One square, single insertion.....	\$1 00
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
“ column, single insertion.....	5 00
“ “ per month.....	10 00
“ “ six months.....	40 00
“ “ per annum.....	80 00
“ page, single insertion.....	15 00
“ “ per month.....	25 00
“ “ six months.....	110 00
“ “ per annum.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—		
	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	9.20 P. M.
Mail and Express.....	8.30 A. M.	6.20 P. M.
Columbus Accommodation.....	4.00 P. M.	11.05 A. M.
Morrow Accommodation.....	6.00 P. M.	8.05 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	8.00 A. M.	8.50 P. M.
Dayton & Sandusky.....	7.00 A. M.	6.45 P. M.
Dayton & Toledo.....	7.00 A. M.	11.40 P. M.
Richmond & Dayton.....	3.15 P. M.	1.50 P. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.55 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	8.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.50 A. M.
Eastern Night Express.....	10.00 P. M.	7.10 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	7.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.55 A. M.
Marietta & Cincinnati—		
Mail.....	7.45 A. M.	5.25 P. M.
Accommodation.....	3.30 P. M.	9.55 A. M.
Ohio & Mississippi—		
Mail.....	6.15 A. M.	10.00 P. M.
Express.....	7.00 P. M.	7.10 A. M.
Indianapolis & Cincinnati—		
Mail.....	5.00 A. M.	12.20 A. M.
Chicago Express.....	5.00 P. M.	10.40 A. M.
Dayton & Michigan—		
Toledo, Detroit & Chicago Exp.....	7.00 A. M.	11.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.55 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	8.00 A. M.	8.50 P. M.
Night Express.....	7.00 P. M.	8.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	8.30 A. M.	6.45 P. M.
Accommodation.....	6.00 P. M.	8.20 A. M.
Kentucky Central— (City time.)		
First Train.....	6.45 A. M.	10.37 A. M.
Second Train.....	2.10 P. M.	6.30 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 13 minutes slower than Cincinnati time.

TRADE BETWEEN CALIFORNIA AND CHINA.

Our readers are aware that Congress at its last session passed a law giving assistance to a California and China line of steam packets. We published at that time some very interesting statistics, showing the amount and probable growth of the trade with the Celestial Empire, the course of exchange and the changes which would be brought about by the establishment of this line of steamers. We find in the *Merchants' Magazine* an able article by Mr. Weiss. Mr. Weiss thinks that too little attention has been paid to this subject, and suggests that we attempt to increase our dealings with the Celestials by producing and selling to them their favorite article of opium. These suggestions are well worth consideration. Mr. Weiss says:

Last year we received from China over \$11,000,000 worth in tea, silk, and sundries, which were paid for as follows:

36 per cent. in six months sight drafts on England against transatlantic shipments
10 per cent. in foreign goods paid as above.
14 per cent. in Mexican silver, paid chiefly in raw cotton.

22 per cent. in domestic cotton cloth.

18 per cent. in provisions, ginseng, mercury, and others (among which but \$80,000 in California gold.)

From this statement we see that 60 per cent. of our Chinese trade consist of an indirect, and but forty per cent. of a direct, exchange of goods with the Celestials.

In both the direct and indirect exchange, cotton, raw and manufactured, plays a conspicuous part, and the failure of this staple makes us more dependent on British interference in our tea trade. The four millions of six months sight drafts against our shipments to England, which we give in part payment to the Hong merchants, serve in their turn to acquit a small portion of the Indo-British and Turkish opium smuggled under the connivance of the British authorities into the Celestial Empire.

The British checked our King Cotton; let us answer them with an attack on their Queen Opium.

They have been studying for some time how to render themselves independent of our cotton; and they have tried hard to increase the cultivation of cotton in Cutch and Guzerat, but normal prices offered no inducement to the indolent Hindoos to extend this rather toilsome branch of agriculture, and even now, under quite favorable circumstances, they move but reluctantly onward, not trusting in the continuance of abnormal cotton prices. Thus, the British, to secure their ends—the continuance of premium prices for cotton growing—do their best to foster the internecine struggle of their once successful rivals in commercial supremacy, in providing the rebels, quite openly, with the means (vessels, arms,

and ammunition) of a protracted resistance.

Our rivals are not aware that we can retaliate on a very tender part of their commercial vitality—say in their opium trade. True, the produce of slave labor was a great stimulus to our trade and navigation, but opium is the *sine qua non* in their Chinese trade, and for this reason the transcendent moralists of Scotland and England never touched the morality of this traffic, in spite of their Puritan zeal in less worldly and less important peccadilloes.

To illustrate the better my assertion, I insert here a paragraph from the *Bombay Times* of the 20th of June, 1853, headed: "Rough Draft of a Petition from the European Community in Bombay unto the Honorable the Commons of Great Britain and Ireland, in Parliament Assembled," and sec. 4, concerning the opium monopoly, says: "Your petitioners would point to the acknowledged fact of the utter want of public thoroughfares of any description, and the deficiency in the means of communication and transport betwixt one part of the country and another. The same circumstances that affect the progress of industry and of interests of trade equally affect the revenues of the country, which from 1841 to 1850 never were once able to meet the public charges, and which hang on such a precarious tenure that, were the Chinese Government to sanction the production of opium within the Empire, or the Americans to settle themselves anywhere in the East where the poppy might be grown, £3,000,000 sterling would be swept from our revenues at once."

In 1850 the importation of Indo-British opium into China amounted to 50,000 chests; ten years after, it reached near 70,000; and now, under her gracious Majesty's direct rule over her Indian dominions, and under the pressure of her recent victories over the poor Celestials, this traffic has swollen to 90,000 chests (!)—apparently to cover the deficiency of the heavy remittances of former years in cotton wool from Bombay and Surat, which are turned now from Canton to Liverpool.

Happily it needs no new settlement to carry into effect the wise suggestions of the *Bombay Times*. Soil and climate in the southern part of California (east of Bombay,) are as good as we can desire for the production of opium, as some Celestial settlers have proved since, although on a small scale, yet to full and satisfactory evidence, and which is not astonishing either, as the poppy, to my knowledge, grows spontaneously on all the elevated plains (plateaux) of the neighboring republic.

Tea has become indispensable with the Anglo-Saxons; its consumption surpasses already 130,000,000 pounds per annum; also silk is largely exported from China to industrious Europe to the amount of over 30,000 bales a year.

Valuing the tea at.....	\$21,000,000
The silk at.....	18,500,000
And sundries at.....	2,500,000

We find the annual export from China to the western world to amount to.....\$42,000,000

It is a well known fact that the Chinese refuse our gold, and that we (the western nations, *i. e.* the red haired barbarians) can settle on this thrifty and crafty people but \$10,000,000 worth in cotton, (?) rice dry goods, copper, ginseng, and the like. How have we to account for the balance without the opium? Why, all the mines of Christendom could not furnish silver fast enough to do it?

One third of the Chinese export goes to the United States. Why should not the citizens of this country not plant this much in opium on the Pacific shores as long as the article sells, and sells well—better than cotton ever did in its best days? This cultivation is monopolized not only by the British, but also by the Dutch and Spanish colonial authorities in India. Much has been said by our Anglo-phobic and Puritan press of the immorality of this trade, yet it has been studiously ignored that our Boston houses in the Chinese ports indulge as largely in this contraband trade as their rivals, the English and Parsee.

Opium is both chewed and smoked; only the former mode of enjoyment of this luxury is detrimental to the human frame, whereas the latter is far less so than the use or abuse of fermented liquors, against which opium smoking may be considered a mere preventive.

The poppy is called in Arabia "Abou numm," the meaning of the Spanish, "Adornidera," and the Latin "Somnifera," and the Arab word "affoon," for its sap, shows the origin of the word opium. This drug has been known for over two thousand years, and its abuse dates back to the Eleusian feasts. Over 400,000,000 of human beings in the Eastern hemisphere are addicted to the habits of opium smoking and chewing.

PEREIRA, in his *Opera Medica*, says: "Opium is undoubtedly the most important and valuable remedy. We have for other medicines one or more substitutes, but for opium we have none, at least in the large majority of cases in which its peculiar and beneficial influence is considered." In England the consumption of opium as a drug has doubled in these last twenty years, and is increasing still; it amounts to over 2,000 chests a year, and no doubt in our republic the consumption of this indispensable drug is not far behind that of the mother country.

The species of poppy cultivated in the East for the sake of the sap (opium) is the so-called garden poppy or *papaver somniferum*, of which there are two kinds, the common white and the common black poppy, both equally rich in sap; the former only excelling in narcotine and the latter in morphine, the substance giving the intrinsic value to opium. Compressed pods are said to contain less morphine than those of oval shape; the same with the poppy with filled blossoms, which is not so rich in sap as the one with simple blossoms. The greatest amount of morphine is obtained from the pods with brownish purple flowers.

The poppy suffers nothing from insects, and its flowers are rich food to the bees. The oil of the white poppy is considered in Europe the best, after the olive oil. The poppy wants calm, warmth, and a loose soil; manure agrees with it on the best of lands—a subsoil of clay is prejudicial to its growth. The poppy thrives well after fallow produce, which leave a clear soil, such as treffle, cabbage, and potatoes; on a rich soil it may be cultivated also in continuance. After the poppy crop, a crop of barley can be raised the same year. Wet does not agree with the poppy, and a rain of two days duration at the maturity of the plant will spoil the whole opium crop. The best opium produced in Asia Minor comes from the plateau in the vicinity of Kara Hisar. The soil of this plain is of volcanic origin, belonging to the trachytic formation.

In the districts of Behar and Benares, in the Ganges valley, the poppy is sown in November; in upper Egypt (Thebes,) in January; and in the Delta, at the spring equinox. In Mexico, the poppies are blooming from April to June. In California, the poppies must be sown towards the end of the rainy season, so that their maturity falls in an epoch when the rain is no more to be dreaded. Heavy night dews are increasing the contents of morphine in the sap. This cultivation takes but three months and a half in the year.

The soil, by rational cultivation, must be plowed and harrowed carefully before the poppy is sown. To an acre, but two pounds of seed are required, which are mixed with earth, so as to throw them thin and regularly enough. Weeds must be rooted out as soon as they spring up, and when the young poppies stand too close, they must be thinned so that every plant has about a square foot room and an easy access to facilitate the collection of the sap, taking heed that the plants, especially on a loose soil, do not stand too thin and can resist the winds. This latter operation is done when the plant has reached two or three inches, before it would disturb it in its growth. A month after the sowing, the ground ought to be hoed, and as soon as the blossoms show, the earth round every plant must be heaped up. No pains in the tillage must be spared, as they will be amply repaid by the increase, and the improvement, too, of the sap of the plant. The Fellahs, who do nothing of the sort, obtain but pods of the size of a large pigeon's egg, whereas, by rational cultivation, they may be brought easily to four inches diameter, and more too.

After the fall of the blossoms, when the capsules or pods are filled with sap, yet before they harden and turn yellow, horizontal incisions are made with an instrument composed of four or five blades united and shaped so that the rind of the pod can not be cut through in the operation. As the falling of the blossoms drags on four to five days, this operation has to be attended to every evening about sunset on the newly bared heads. The pods

by ripening lose a great part of the morphine salt, so it is not convenient to postpone the bleeding of the pods even for a day. The collection of the sap by scratching off with blunt knives is done at the end of the bleeding operation, no inconvenience to be feared by waiting so long, as the sap hardens quick and never drops to the ground.

The ripening of the seeds is not injured by the bleeding of the pods as regards the oil, only for sowing they will not do because the plants they produce are weak and poor in sap and the sap too of inferior quality; therefore the seeds for sowing must be taken from unhurt pods. To this purpose large capsules of oval shape are selected, which are dried in the shade, and filed on strings by the stems and hung up in a dry room with not too much draft, where they remain unopened till seed time.

An acre of poppies will give from forty to fifty pounds of opium by bleeding; but in Turkey also the stems and leaves (after the pods being removed) are collected and well boiled in water on the spot. The decoction, without being strained, is poured out into pans, mixed up with the sap of the pods, then boiled down to the consistency of soft pitch, formed into loaves of about a pound weight and wrapped into poppy or tobacco leaves to keep them from sticking together. But a trifle of opium in drops, *i. e.* from the pods merely, is brought to market in the bazaars of Constantinople and Bressa to suit the Theriakées (opium eaters); such opium contains from 12 to 15 per cent. of morphine; the decoction from the stems and leaves contains about 5 per cent., and the compound of both from 9½ to 10 per cent. of the costly salt. Of this latter drug, known as the Smyrna opium, an acre produces largely one hundred and twenty pounds.

The Turks, in the new treaty of 1840 with their teachers in commercial liberty and morality—the Russians, Austrians and Englishmen—along with the rest of monopolies, had also to surrender the one in opium; still the latter cling to the opium monopoly to this day with the same tenacity as our slave aristocracy to their peculiar institution. So the leaseholders of certain districts in British India are bound to produce and to deliver annually a given quantity of this drug to the Colonial Government at the fixed price of \$150 the chest, of 140 lbs. of opium, a price which still leaves a small remuneration to the producer. According to information collected personally on the spot, the cost of production of opium in Upper Egypt is about 60 cents, and in Anatolia (Asia Minor) 75 cents the pound. In the latter province, in spite of the abolition of monopolies, the Turkish governors still control this trade to their own benefit.

To secure to the enterprise the speediest success, the operations ought to be entered upon with 10 or 20 Greek families from Magnesia, in the opium districts in Asia Minor.

who, along with the production of opium, would devote themselves also to the drying and preserving of figs and grapes and the culture of wine.

The fermentation between the Christian and Moslem subjects of the Porte is growing worse every year, the former, by far the weaker part in the Asiatic provinces, are in constant dread of a repetition of the butcheries of Damascus and Djudda, and will gladly avail themselves of any opportunity to move to better parts, especially if the chance is given to them to continue their mode of living in the accustomed way, and in a country as beautiful, and in a climate as mild as in the land of their birth. This is certainly the case with the southern part of California on the banks of the Gila and Colorado rivers in the vicinity of San Diego.

To try to succeed. The production of opium wants neither chemical or mechanical skill, no costly apparatus, no large outlay of capital, and in the vicinity of San Diego, land, labor, and cattle are at normal prices, unaltered yet by gold excitement or emigration. Any amount of opium produced there would find a ready market in the capital of the State, whose commercial relations with Japan and China are improving daily. Opium in California will lead the Chinese tea over the projected Pacific railroad, and will create a revolution in the Eastern trade, not much to the benefit either of England or France.

SUGAR BEET MANUFACTURE IN LICKING COUNTY, OHIO.

From the Cincinnati Daily Commercial.

Ens. Com.:—During the autumn and winter of 1861. Professor Maurice A. Mot, succeeded in manufacturing some very fine samples of sugar from the German and French sugar beets, grown in the gardens of Messrs. Geo. Parsons and Governor Chase, in the city of Columbus. Stimulated by these successful efforts, Mr. Mot determined to make the experiment on a large scale, and accordingly leased ten acres of the well known Penney farm, about two and a half miles west of Newark, Licking County.

One acre of this ground had been well manured in the spring of 1861, and planted in potatoes, and yielded about two hundred bushels of this tuber as the crop. The remaining nine acres had been, during the five preceding years, grown in corn, without either rotation or manure—in fact, there was no authentic evidence at hand to prove that any portion of these nine acres had been manured since 1847; but as the soil is a strong loam, the crops were satisfactory to the cultivators, whether remunerative or not.

On the 28th of April, 1862, Mr. Mot, commenced to have the ten acres plowed and prepared for planting the beet seeds. Here arose the first difficulty—he insisted upon having it broken up with a double plow and then subsoiled. A double plow was a “new fangled innovation” upon the time honored system of farming, and Mr. Mot, “the crazy Frenchman,” had considerable difficulty in obtaining plowmen to perform the requisite labor, but finally succeeded in getting it done

rather indifferently than otherwise. the one acre “potatoe patch” was all that he could get subsoiled.

On the 8th of May he commenced planting the seed, which he had imported from France—a portion of the seed was the “Vilmorin Improved,” and the other was the “Imperial.” After the land had been plowed, subsoiled and harrowed, it was thrown into ridges, two feet apart, and on the top of these ridges the seed was planted; one seed in a place, six inches apart. The seed used was about one pound per acre. The seeds being planted six inches by two feet apart is equivalent to one seed on every square foot, and as there is 43,560 square feet in an acre, it follows, then, that by using a pound of seed per acre, that there are upward of 43,000 seeds in a pound. There were thus regularly planted, 383,000 seeds, and 158,000 seeds were planted in a separate bed for replanting—but 30,000 only were replanted, and what is important in this matter is the fact that all the transplanted beets proved a failure. Transplanting was first done on the 24th of June, and the last of it on the 15th of July.

On the 9th of June, Mr. Mot commenced, with some workmen and children, the task of hoeing and weeding. From the time he commenced hoeing until the first of September, the beets received his unremitting attention in hoeing, weeding and plowing. On the 2d of July, they were first plowed, and on the 21st of the same month, they were plowed a second time. More hoeing was done on account of the drought that would have been required in an ordinary season—and the entire tract of ten acres required an unusual amount of labor to keep it clean, owing to its previous very foul condition. The people in the neighborhood remonstrated with Mr. Mot for lavishing so much care and attention upon the crop; and even now, rather intelligent farmers in the vicinity offer to cultivate the tract in beets for less than half what it cost Mr. Mot. The breaking up, planting, hoeing, weeding, plowing, gathering and housing the crop has cost him just \$300. Several parties have proposed to cultivate the same tract in 1863 for \$100, but Mr. Mot is fearful that they would cultivate as they do their own crops, that is, not to give it the seasonable and proper attention.

On the 5th of October, the beets were plowed out with a shovel plow, drawn by one span of horses. Although a single seed only was planted in each hill, yet, when they were harvested, three and, not unfrequently, four beets were found in a hill. It is estimated by those who harvested the crop, that fully one million of beets were gathered from ten acres. It was during the work of harvesting the crop, that the laborers and neighboring farmers were astonished at the results produced by manuring and subsoil plowing. The manured and subsoiled acre produced four pyramidal pits of beets, each pit being of an uniform size, whereas the remaining nine acres produced six pits only in the aggregate, or two-thirds of a pit per acre,—thus demonstrating that the properly-cultivated acre produced just six times as much in bulk as did any one of the other nine acres. There were as many beets in one acre as in another; it follows therefore as a necessary conclusion, and this conclusion is fully confirmed by the fact susceptible of ocular demonstration, that one beet grown on the subsoiled acre is as large and weighs just as much as six grown on any other of the acres. Whether one of these large beets will yield six times as much sugar as one of the other beets, has not yet been demonstrated, and possibly the productive ratio will be decreased. I have alluded

to this fact as a proof of the advantages attendant upon thorough culture in the production of any crop whatever.

It is somewhat difficult to determine the amount of beets grown on the ten acres. Mr. W. modestly assumes that there were about ninety-five tons, and that thirty-five of these tons were the product of the sub-soiled acre. There were two small pits, in addition to the ten already mentioned, which were made up of small, defective, or frosted beets; each of these two pits measured one ton, but after having used 2,000 pounds by weight out of one of these pits, it was ascertained that fully one-half yet remained in the pit. Should this proportionate increase be found to be true in all the other pits, there would then be fully 190 tons of beets instead of ninety-five. Supposing that 190 tons were grown upon the ten acres, it would not be an extraordinary crop, because the *Journal d'Agriculture Pratique* informs us that twenty tons per acre are by no means unfrequently produced in France. Mr. M's product would be nineteen tons per acre, with one acre producing seventy six tons. In 1859, Mr. Joseph Sullivan, of Columbus gave me the details and results of his experience some twenty-five or thirty years ago, and among other things he said: “I have no doubt that an average yield of thirty tons of beets per acre, upon good, suitable soil, moderately well cultivated, can be secured. Corn ground which produces sixty-five bushels per acre, may be easily made to produce thirty or thirty-five tons of beets.”

Receiving a friendly note to visit the Prof. and his “sugar works,” I set out on the morning of the 5th of December, to see and investigate for myself, in company with John S. Gill, Jr., of this city. After arriving on the premises, the Prof. at once went to demonstrate the *modus operandi* of extracting sugar, very good samples of which we found on a table in his sugar house, from the beet. His machinery and apparatus are all not quite of the *rustiest*, but most assuredly of the simplest and cheapest kind—consequently very imperfect. Being a man of very limited means, but persevering, competent, and enthusiastic, he certainly has accomplished wonders with his slender capital. The neighbors believing him to be a monomaniac, or at least slightly aberrated in mind, would not extend a credit of a single dime to him, and would perform no labor for him except that which their common, or un common sense dictated as proper to be done. Consequently he was exceedingly annoyed by petty vexations and trials; and one having less determination than he has would have had their enthusiasm brought to zero or lower, and would have abandoned the enterprise in disgust.

The first operation to be performed is to reduce the beet to a pulp. This is done by a cylindrical rasp or grater. This grater is operated by an ordinary threshing machine horse-power. The grater is two feet in diameter, eight inches wide, and revolves 250 times in a minute. In the course of half an hour (by the watch) one thousand pounds of beets were reduced to a fine pulp. The pulp is then put up in gunny bag cloths, in the form of mats, and placed in a hand-press. In a few minutes the 1,000 pounds of beets yielded seventy-eight gallons of juice, weighing a trifle over eight pounds per gallon. With a proper press and motive power, the beet will yield about 90 per cent. of juice; but in today's operations the Professor obtained 62½ per cent. only. Mr. M., however, said that he would steam the pulp, and press it again, when he would get from 15 to 20 per cent. more. From the press the juice is

STATEMENT of earnings from passenger, freight and all other sources, for the years ending Sept. 30, from 1853 to 1862, both inclusive:

	Passengers.	Freight.	Other Sources.	
1853.....	\$2,829,669	\$1,833,372	\$12,279	\$4,787,520
1854.....	3,151,514	2,479,821	987,000	5,918,334
1855.....	3,242,229	3,190,603	121,749	6,563,581
1856.....	3,207,378	4,324,041	171,928	7,707,338
1857.....	3,147,637	4,559,276	329,339	8,027,251
1858.....	2,332,646	3,701,270	995,466	6,5,8,413
1859.....	2,506,370	3,230,934	297,341	6,200,849
1860.....	2,369,265	4,695,934	292,042	6,457,241
1861.....	2,315,933	4,664,449	328,660	7,309,142
1862.....	2,349,724	6,407,331	359,773	9,356,828
9 years...	\$23,122,696	30,961,873	2,484,318	54,568,87

BALANCE SHEET

From General Ledger, Sept. 30, 1862.

Railroad and equipment.....	\$31,787,397 80
Cash in banks.....	\$621,499 11
Passenger and freight agents; balances since remitted.....	605,967 51
Buffalo and State Line R.R. Co. stock.....	357,800 00
Troy Union R.R. Co. stock.....	48,550 00
Hudson River Bridge Co. stock.....	30,240 00
Lake Propeller stock.....	145,990 46
Future Income: Proportion of debt certificates, etc., chargeable to the income of the company, pursuant to the consolidation agreement, from September 30 1862, to May 1, 1863.....	7,429,500 00
Fuel and supplies; surplus beyond \$1,000,000.....	341,409 74
Bills receivable.....	\$71,326 35
General Post Office Department.....	23,947 50
U. S. Troops account.....	52,914 84
Real estate (Buffalo and Niagara Falls R.R. Co.).....	32,300 00
Real estate (Oliver Lee & Co.'s Bank).....	28,792 48
	209,480 67
	\$41,866,835 29
Capital stock.....	\$24,000,000 00
Funded Debt Albany and Schenectady R.R. Co.....	\$125,000 00
Do. Schenectady and Troy R.R. Co.....	100,000 00
Do. Buffalo and Rochester R.R. Co.....	32,118 22
Do. Buffalo and Niagara Falls R.R. Co.....	24,000 00
Debt certificates.....	\$7,350,000 00
Bonds for convertible loan.....	3,000,000 00
Bonds for R.R. stock.....	163,000 00
Bonds for real estate.....	165,000 00
Bonds for funding debts of old Co.....	1,192,000 00
Bonds to Buffalo and Niagara Falls R.R. Co.....	79,500 00
Bonds, convertible, due 1876.....	590,000 00
Bonds and mortgages.....	252,975 15
	13,999,475 15
Bills payable.....	33,902 23
Unclaimed Dividends.....	\$6,118 88
Expenses of operating the road; paid in October.....	520,129 53
Coupons and interest—accrued to Sept. 30.....	346,818 26
	863,056 67
Income account; balance Sept. 30, 1862.....	2,690,295 02
	\$41,866,835 29

The following is a detailed statement of the funded debt:

Debt Certificates, or Premium Bonds, issued to stockholders in 1853, under the Consolidation Agreement, payable May 1st, 1853, with interest at 6 per cent. per annum, payable semi-annually, on 1st May and November.....	\$8,892,600 00
Debt the amount of these certificates purchased for the Sinking Fund provided for their payment under the Consolidation Agreement, and cancelled.....	1,542,600 00
	\$7,350,000 00
Amount outstanding of the debts of the former companies, assumed under the Consolidation Agreement.....	257,118 22
Bonds of the Buffalo and Niagara Falls Railroad Company, assumed under the lease of that road, payable October 1st, 1861, interest at 7 per cent. per annum, payable semi-annually, on 1st January and July.....	24,000 00
Bonds for funding the principal of the debts assumed to the former Companies, at consolidation, payable Aug. 1st, 1861, interest at 7 per cent. per annum, payable semi-annually, on 1st February and August.....	\$1,820,000

Less amount cancelled and held by Sinking Fund.....	182,000
	1,498,000 00
Bonds to the Stockholders of the Buffalo and Niagara Falls Railroad Company, under the lease before referred to, payable May 1st, 1853, interest at 6 per cent. per annum, payable semi-annually, on 1st May and November.....	\$110,800
Less amount cancelled and held by Sinking Fund.....	31,300
	79,500 00
Bonds for railroad stock payable May 1st, 1853, interest at 6 per cent. per annum, payable semi-annually on 1st May and November.....	\$817,000
Less amount cancelled and held by Sinking Fund.....	154,000
	663,000 00
Bonds for Real Estate purchased, payable May 1st, 1853, interest at 6 per cent. per annum, payable semi-annually, on 1st May and November.....	\$235,000
Less amount cancelled and held by Sinking Fund.....	70,000
	165,000 00
Bonds and mortgages for Real Estate purchased, with interest at 7 per cent. per annum, excepting \$5,562 54, the interest upon which is at 6 per cent. per annum.....	252,974 15
Bonds of June, 1854, payable June, 1864, interest at 7 per cent. per annum, payable semi-annually, on 15th June and December.....	3,000,000 00
Bonds of August, 1859, payable August, 1876, interest at 7 per cent. per annum, payable semi-annually, on 1st February and August with convertible privilege, at par, for ten years.....	990,000 00
Total amount of Funded Debt, September 30th, 1862.....	\$14,279,591 37

The Company has no Floating Debt.

During the year the Company has occasionally given acceptances, as heretofore; the amount of which, outstanding at the close of the fiscal year, was \$33,890 23.

The average rate per annum of interest on Funded Debt, 6 35-100 per cent.

All the interest due by the Company, except on mortgages, is payable in the city of New York.

REMARKS ON THE BUSINESS OF THE YEAR.

In Debt Certificates.....	\$202,000 00
" 7 per cent. Bonds due in 1876.....	55,000 00
" Bonds for Railroad Stock.....	17,000 00
" " Real Estate.....	1,000 00
" " to Buffalo and Niagara Falls Railroad Company.....	3,000 00
Increase in Sinking Fund in hands of State Comptroller, for redemption of the State Stock issued to the Tonawanda Railroad Company, which forms a part of the Debts of the former Companies still outstanding.....	6,435 63
	\$284,435 63

The amount of income used for the Construction and Investment Accounts, as shown by the report of last year, independently of the item of fuel and supplies referred to below, was \$1,466,852 15.

The amount so used was, at the close of the fiscal year just ended, as shown by the following statement, \$1,719,884 89.

Construction Account.....	\$31,787,397 80
Investment.....	782,680 46
	\$32,569,978 26
Capital Stock.....	\$24,000,000 00
Funded Debt, less Debt Certificates and Bonds to Buffalo and Niagara Falls Railroad Co., for premiums allowed at Consolidation.....	6,850,093 37
	30,850,093 37
	\$1,716,884 89

To the amount shown at the close of each fiscal year, as above, should be added, for the purpose of showing the full result, the value of Fuel and Supplies not included in the assets of the Company, as will appear from the Inventory and Balance Sheet contained in the Report, \$1,000,000.

It will be seen from the Report, that the business of the year has been considerably larger than in any previous year; owing, mainly, to well known causes which have also favorably affected the business of most of the main lines of road in the northern States,

but which, to a considerable extent, must be looked upon as temporary in their nature.

During the past year, the cost of the following items has been charged to Construction Account:

Land for additional Freight accommodations, principally at Albany and Buffalo.....	\$59,140 34
Amounts paid on account of erections and improvements at West Albany, as referred to in the Annual Report for 1861, including payments made within the present year for work partly completed when that Report was made.....	204,031 31
	\$263,171 65

All the other expenditures made during the year, except such as appear in the increased value of Fuel and Supplies on hand, have been charged to Transportation Expenses, and include besides the ordinary items of general repairs, the following:

The addition to the Equipment of 14 Locomotive Engines and 483 Freight Cars.

The addition of new sidings and turnouts, at various points along the line, amounting in the aggregate to 6.31 miles.

The addition of three miles to the second track, between Burgen and Churchville, on the Buffalo and Rochester division.

The erection of buildings at various points on the line, for Freight and Passenger accommodations.

The substitution of Iron for Wooden Bridges, referred to in the last Report, has been continued. During the year this substitution, reduced to single track, has amounted to 697 feet, making with the amount heretofore reported, an aggregate of 4,670 1-6 feet now upon the line.

The renewal of Iron Rails during the year amounted to 8,297 tons, equal to 84½ miles of single track.

The number of Ties renewed during the same period was 250,265.

The equipment of the road consists of 229 locomotives; 196 first class 8 wheel passenger cars; 35 second class and emigrant cars; 63 baggage, mail, and express cars; 3,242 freight cars; and 350 cars for gravel and other service. All the engines are in good condition; 14 locomotives, and 483 freight cars have been added during the year, and charged to repairs of machinery in expense account.

Miles run by passenger trains, 1,753,215; by freight trains, 3,233,565; by other trains, 381,892. Aggregate miles run by passenger cars in passenger trains, 5,389,141; do., by baggage, mail and express cars, do., 2,452,301—aggregate miles run by all cars in passenger trains, 7,841,442.

Number of passengers carried in the cars, 2,276,977. Miles traveled by passengers, 119,028,024. Tons of freight carried, 1,387,433. Total movement of freight, or number of tons carried one mile, 296,963,492.

The rate of speed adopted for ordinary passenger trains is 28 miles per hour; by express trains, 35 miles; by freight trains, 15 miles.

Length of main line from Albany to Buffalo 297.75 miles; length of side, or parallel branch lines, 258.13—total length of first track, 555.88; length of second track on main line and branches, 246.53; length of sidings, turnouts and switches, 132.56—total length of equivalent single track, 924.97 miles.

Length of Niagara Bridge and Canandaigua Railroad, (leased) 88.46 miles; Branch line to elevator at Tonawanda, 1.63; sidings, turnouts and switches, 3.42—total length of equivalent single track, 103.51 miles.

The officers of the company for the year are President, Erastus Corning; Vice-President, Dean Richmond; Executive Committee,

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	64	48	\$	\$	\$	\$	\$	Sept. 30, 1860	Maryland Sterling.	3,000,000	5			
Baltimore and Ohio.....	Md.	64	380	13,111,800	10,781,833	506,07	3,922,203	2,305,788		Mortgage.....	2,500,000	6	95	1885	
do do										"	700,000	6	84	1880	
do do										"	1,125,500	6	90	1875	
do Washington Branch.....	Md.		30	1,650,000						"	1,000,000	6		1867	
Bellefontaine and Indiana.....	Ohio & Ind.	118	118	1,859,813	1,256,750	139,126	314,000	8,795	Dec. 1860.	1st Mortgage.....	791,000	7	55	1866	
do do										2d "	160,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	60	68	1,950,950	1,040,000	27,54	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	138	75	1,101,432	1,428,000		164,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	96	96	3,98,400	8,880,000		1,997,065	733,950	Dec. 31, 1860	1st Mortgage.....	307,000	6	100	1864	
Central Ohio.....	Ohio.	137	137	In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7	62	1861	
do do										1st "	800,000	7	80	1864	
do do										2d "	80,000	7	64	1865	
do do										3d " S. F.	950,000	7		1865	
do do										4th " S. F.	1,365,800	7		1876	
Central of New Jersey.....	N. J.	64	64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d "	600,000	7		1875	
Chicago, Alton and St. Louis.....	Ills.	222	222	In hands of Receiver.	6,168,520	730,000	904,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7			
do do										2d "	1,535,000	7			
do do										3d "	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d "	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194	194	2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	1st Mort. & S. F. Gen'l 1st Mortgage.	1,250,000	7	101	Feb. & Aug. 1	
do do										2d "	3,600,000	7	77	Feb. & Aug. 1	
Chicago and Rock Island.....	Ills.	81	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	2d "	2,400,000	6	31	May 1.	
Chicago, Burlington and Quincy.....	"	88	138	4,689,340	4,814,515		1,314,428	761,830		1st Mortgage.....	2,000,000	7	105	1870	
do do										Cons. 1st Mort. S. F.	2,172,000	8	110	1873	
do do										" 2d " S. F.	813,000	8	108	1890	
do do										1st Mort. Chi. & Aur.	390,000	7		1867	
do do										2d "	303,000	7		1869	
do do										1st "Cent. Mil. Tract	39,000	7		1864	
do do										2d "	245,000	8		1868	
Chicago, Iowa and Nebraska.....		82	82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	105	60	2,155,800	1,350,000		644,928	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	950,000	7	100	1880	
Cincinnati Wilmington & Zanesville ..	Ohio.	132	132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
do do										Income.....	305,500				
Cleveland and Mahoning	Ohio.	68	68	1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d "	490,000	7			
do do										3d "	341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	42	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7	90	1873	
do do										3d 2d Ex.....	1,165,000	7	81	1865	
do do										4th 3d Ex.....	1,154,000	7	73		
Cleveland and Toledo.....	Ohio.	69	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mort. Jun. 1st Div.	359,000	7	103	1867	
do do										1st " " 2d Div.	263,000	7		1872	
do do										2d " " "	265,000	7		1862	
do do										1st " Tol. Nor. & Clev	521,000	7		1863	
do do										2d " " "	293,300	7		1864	
do do										Junction Income..	41,500	7		1862	
do do										C. & T. Income....	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	145	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	145	98	3,000,000	1,602,000	none	1,063,405	633,047	Nov. 15, 1860	1st Mortgage.....	564,000	7	106	1861	
do do										2d "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	115	54	1,490,000	290,700	50,500	See L. Miami.			Dividend.....	272,700		100	1860 to 1866	
Columbus, Piqua and Indiana.....	"	103	142	In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142	142	2,176,666	2,512,000	292,267	375,002	212,107		2d "	2,212,000	8			
Dayton and Western.....	Ohio.	38	38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	50		
Detroit and Milwaukee.....	Mich.	186	186	No report						1st Mortgage.....	2,500,000	7	90	1875	
do do										2d "	1,000,900	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111	111	No report											
Dubuque, Marion and Western.....	"	51	51	No report											
Eaton and Hamilton.....	Ohio.	36	36	469,762	728,853	152,694	152,322	43,265	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132	132	96,061	1,219,100	249,68	124,140			1st Mortgage.....	400,000				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						2d "	181,000				
Galena and Chicago Union.....	Ills.	82	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,983,000		104	1862 & 1863	
do do										2d "	1,230,000		100	May 1, 1875	
Great Western	Ills.	175	175	1,600,000	2,391,000		45,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	F4	F4	400,000	No report										
Greenville and Miami.....	Ohio.	32	32	300,000	473,000	75,000	63,141	13,573		Land Mortgage...	5,000,000				
Hannibal and St. Joseph.....	Mo.	206	206	1,041,086	10,554,000	220,36	996,907	512,933	Sept. 1, 1860.	Mortgage Conv....	1,334,000		54		
do do										1st Mortgage.....	927,000	6	30	1873	
Hartford and New Haven.....	Conn.	62	62	2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1866	1st Mortgage.....	4,000,000	6	18	1869 & 1870	
Hudson River.....	N. Y.	77	144	3,738,466	9,107,000	162,106	2,047,145	778,121	Sept. 30, 1860	2d S. F.	2,000,000	7	114	1870	
do do										3d "	1,840,000	7	104	1875	
Illinois Central.....	Ills.	78	455	15,654,960	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	58,000	7		1868	
do do										Construction.....	12,883,000	6	97	1875	
do do										Debitures.....	42,740	7		1875	
Indiana Central.....	Ind.	72	72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	60,000				
do do										2d "	578,000	10			
do do										Income.....	38,700	11			
Indianapolis and Cincinnati.....	Ind.	110	110	1,689,900	1,362,284	140,659	448,858	230,834		1st Mortgage.....	500,000			1866	
do do										2d "	400,000				
Indianapolis Pittsburgh and Cleveland	Ohio.	84	84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort...	200,000		90		
do do										1st Mortgage.....	649,984				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d "	314,000				
Iowa.....	Ohio.	13	13	118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock	Lot of R. d	Capital paid in.	Total Funded Debt.	Cost in Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond	Due.
Iron Mountain.....	Mo.	86 1/2		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000	7	75	
Jacksonville.....	Ind.			1,015,907	681,000		302,006	132,797	Dec. 31, 1860.	1st ".....	2,900,000	7	70	1861
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,532	426,408	227,534		2d ".....	392,000	7		1873
do										1st Mortgage.....	160,000	6		
do										1st ".....	200,000	7		
do										2d ".....	1,000,000	7		
do										3d ".....	600,000	7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	200,000		89	
do										2d ".....	1,000,000			
do										1st Land Grant W D	4,000,000		21	
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report							
Lexington and Frankfort.....	Ky.	29		514,433	130,000		109,944	43,267	June 30, 1861	1st Mortgage.....	130,000	6		
Little Miami.....	Ohio.	115		65			1,330,030	529,981	Jan. 1, 1862	1st Mortgage.....	1,300,000	6		1863
Louisville and Frankfort.....	Ky.	65		1,169,59	334,519		245,910	98,679	June 30, 1861	City Loan.....	174,000			
do										1st Mortgage.....	2,000,000			
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st ".....	400,000	7		
do										1st " Lebanon Br.	400,000			
Louisville, New Albany and Chicago..	Ind.	258		2,800,000	3,000,000	206,000	645,827	371,402		1st " Memphis Br.	500,000			
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,030	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861
Marietta and Cincinnati.....	Ohio.	208		8,561,213	190,408	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868
do										2d ".....	2,000,000	7		
do										3d ".....	1,500,000	7		
do										Sterling Income.....	333,000	4		
Michigan Central.....	Mich.	90	284	6,057,784	7,963,429	125,000	2,126,699	910,169	May 31, 1861	Domestic.....	925,517			
do										1st Mortgage 4 Sterling	467,483	6	92 1/2	1872
do										1st " Conv.	500,000	8	84	1869
do										1st " unconv.	250,000	8	96	1860
do										1st " Dollar Conv.	2,500,000	8	106	1869
do										1st " N. F. Conv.	4,153,000	8	112 1/2	1862
Michigan South'n & North'n Indiana	Mich &	39 1/2	246	9,018,200	9,714,764	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. S.....	991,000		108	1860
do										" Nor. Ind.....	985,000		103	1861
do										" Goshen Line.....	1,168,000		100	1869
do										S. F. Toledo.....	2,558,000		103 1/2	1865
do										2d Mortgage.....	2,465,000		93 1/2	1877
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d ".....	200,000	8		
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8		
do										2d ".....	600,000	8		
Milwaukee and Prairie du Chien.....	Wis.	31	192	4,944,000	2,556,000		683,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	104	1891
Milwaukee and Western.....	Wis.	71		No report										
Mississippi and Missouri.....	Iowa,	55		No report						1st Mortgage Conv.	1,000,000	7	96	
do										2d ".....	400,000	8		
do										S. F. Oskaloosa Div.	1,425,000	7		
do										Land Grant.....	7,000,000	7		
New Jersey.....	N. J.	155	34	4,397,800	688,000		992,767	579,921	Dec. 31, 1861.	Mortgage.....	711,000		109	
New Jersey Central.....	N. J.	94 1/2	64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860					
New York and Erie Pref.....	N. Y.	62		Sold under mortgage			5,590,916	1,979,400	Sept. 30, 1860	1st Mortgage.....	3,000,000		106	
do										2d ".....	4,000,000		110	
do										3d ".....	6,000,000		107	
do										4th ".....	4,900,000		101	
do										5th ".....	1,792,300		97	
New York and Harlem Pref.....	Conn.	50	138	5,717,190	6,035,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	109 1/2	1873
do										2d ".....	1,000,000	7	105	1864
New York and New Haven.....	Conn.	21		3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	7	94	Dec. 1, 1866
do														
New York Central.....	N. Y.	103 1/2	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,492,500	6	106	Oct. 1, 1873
do										Mortgage.....	3,000,000	7	115	May 1, 1863
Northern Central.....	Md.	138		2,260,000	5,890,300	537,925	1,018,103	283,627	Dec. 31, 1860	Construction.....	2,000,000	6		June 15, 1864
North Missouri.....	M. S.			2,423,736	4,350,000	93,796	400,000	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6		1865
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,330,000	6		
do										2d ".....	316,345			
do										Construction.....	4,637,920			
do										Income.....	3,591,185			
Ohio and Mississippi, Western Div....	Ills.	148			3,292,403		No report							
Pacific.....	Mo.			3,199,662	7,000,000	334,382	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000	6		
do										" S. W.....	2,800,000	6		
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	Construction.....	4,500,000	6	104 1/2	1888
do										1st Mortgage Conv.	4,900,000	6	98 1/2	1875
do										2d ".....	2,319,000	6		
do										2d " Sterling.	1,937,400	5	89	1875
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report			State Works.....	7,200,000			
Philadelphia, Wm. and Baltimore.....	Del.	98		5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6	99 1/2	1894
do										Improvement.....	119,000	6		1863
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	51	467	Sold for Planting Debt.	10,192,155	1,757,273	2,353,303	761,555	June 30, 1861	1st Mort. O. & P..	1,000,000	7	107	1865
do										2d ".....	750,000	7	93	1866
do										1st " O. & I.....	1,000,000	7		1872
do										2d ".....	300,000	7		1873
Pittsburgh and Connellsville.....	Pa.	49		1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000			
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,065,328	220,650	68,438	May 10, 1861					
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,000	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1858
do										".....	997,000	7		1866
do										".....	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	195,974	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1866
Santa and Hocking Valley.....	Ohio.	58		40,075	500,000	100,000	110,200	53,100						
Springfield, Mt. Vernon & Pittsburgh.	Ohio.	59		1,000,000	1,050,000	200,000				1st Mortgage.....	500,000			
do										2d ".....	430,000			
Stevensville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d ".....	900,000	7		1863
do										1st Mortgage Conv	1,000,000	7	100	1862
Terre Haute, Alton and St. Louis....	Ills.	208		No report						2d ".....	2,000,000	7	78	1868 & 1870
do										1st " Bel. & Ill	517,000	7		1873
Terre Haute and Richmond.....	Ind.	105	73	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	1,400,000	7	98 1/2	Aug. 1, 1865
Toledo, Wabash and Western.....	Ohio & Ind	35	243	2,123,506	5,990,049	54,289	233,545			1st Mortgage.....	2,500,000	7	81 1/2	Nov. 1, 1878
do Preferred		80								Mort. Coupons....	98,049	7		1860 to 1865

Messrs. Corning, Richmond, Chedell, Page, and Martin; *Committee on Accounts*, Messrs. Spraker, Tracey, and Blatchford.

MINERAL WEALTH OF GREAT BRITAIN.

The *London Mining Journal* gives the following statistics of mineral production in Great Britain for the year 1861:

The statistics of the mineral produce of the United Kingdom for 1861 are again favorable, upon the whole, as compared with the preceding year, though the aggregate increase is not quite so large as that of 1860, compared with 1859. We have been favored by our esteemed correspondent, Mr. Robert Hunt, with an early copy of the return. He explains that a considerable portion of the returns of the mineral produce for 1861 had been collected, and a large section of this publication was in type in the month of July. It was, therefore, hoped that these statistics would have been issued much earlier than the actual date of publication. Several very important returns could not, however, be obtained until the end of September, and some corrections were not returned before October. The value of the mineral statistics is greatly increased by their being placed in the hands of the public as early as possible in each year. It is, therefore, earnestly hoped that those on whose liberality we depend for the correctness of these mineral returns will, obligingly, in future communicate with the *Mining Journal*, or the Mining Record Office, with as little delay as possible after the commencement of the year. The following summary will show the position maintained by the mineral industries of the United Kingdom during the year 1861:

GOLD.—It is worthy of especial note that in 1861 we have an actual return of gold from a British mine. This is obtained from one of the quartz lodes in the neighborhood of Valdeley Meerionethshire. The quantity actually obtained during the year being 2,784 standard ounces, of the value of £10,816 17s. The natural consequence of this has been the formation of several companies to work other lodes of a similar character in North Wales, the progress of which will be watched with much interest.

TIN.—The quantity of tin ore (black tin) produced during the year 1861 was larger than that obtained in the previous year, 1860, in which it will be remembered there was a diminution. In 1860 there was produced 10,462 tons of black tin, giving 6,695 tons of metallic tin, and during last year 11,640 tons of black tin, giving 7,450 tons of metallic tin; so that we had an increase of 755 tons of metallic or white tin. At the same time, as there was a larger quantity of tin smelted in this country, there was a considerable falling off in the demand of this metal from America; the export of tin plate to the United States in 1860 being of the value of £1,018,536, whereas in 1861 our exports to those States were only to the amount of £417,360. This led to a reduction in price, English block tin in 1861 being £122 5s per ton, against £136 3s. in 1860. At this lower price large sales have been effected, and the result has been—in 1860, of British tin, 2,740 tons, 11 cwt., and of foreign and colonial tin, 508 tons 3 cwt.=3,248 tons 14 cwt.; and in 1861, of British tin, 2,827 tons, and of foreign and colonial tin, 958 tons 13 cwt.=3,785 tons 13 cwt. We have, therefore, exported of British tin, 86 tons 9 cwt., and of foreign and colonial tin 450 tons 10 cwt.

more than in 1860. The returns made to the Stannary Court for the two years ending September 22, 1861, were—of black tin in 1860, 70,400 tons; and in 1861, 10,963 tons; of metallic tin, 6,656 tons in 1860, and 7,016 tons in 1861; the total value being £866,306 in 1860, and £857,706 in 1861.

COPPER.—The production of copper from the mines of the United Kingdom has been—in 1860, of ore, 230,696 tons, worth £1,507,133; and of fine copper, 15,968 tons, worth £1,706,261; while in 1861 there was a production of 231,487 tons of ore, worth £1,564,727; and of fine copper, 15,331 tons, worth £1,527,480; so that there was a decrease of 5,209 tons of ore, worth £142,400, and of 637 tons of fine copper, worth £183,781. Adding to this the metallic copper smelted from foreign and colonial ores, we have as the estimated value of our total produce in 1860, £3,466,398, and in 1861, £3,170,955; showing an increase of £24,557. It will be seen upon referring to the export returns of British copper, that there was a slight falling off in 1861.

LEAD.—The produce of the lead mines of these islands within the year has increased. In 1860 the production was 89,081 tons of lead ore, and 63,525 tons of lead; and in 1861 the production was 90,696 tons of lead ore, and 65,643 tons of lead; showing an increase of 1,615 tons of lead ore, and 2,118 tons of lead. The value of these being in each year respectively—in 1860, of lead ore, £1,236,749, and of lead £1,417,415; and in 1861, of lead ore, £1,136,249, and of lead £1,445,255; showing a decrease in lead ore of £100,500, and an increase in lead of £27,840. The exports of lead were—in 1860, 25,797 tons; and in 1861, 19,209 tons; showing a decrease of 4,530 tons.

SILVER.—The silver obtained from the lead raised from British mines amounted to 566,530 ozs.; having a value of £144,261 17s in 1861, against 549,720 ozs.; having a value of £151,173 in 1860.

ZINC.—Owing to the low price of zinc ore during the last year, several mines have ceased to produce it, and in many instances, where the mine had been mostly dependent upon its production of blende, there has been an unwillingness to furnish correct returns of the diminished value of the ores produced. Even at this low price large quantities were forced on the market. Hence the returns of zinc, as given this year, are to some extent estimated. In 1860 we produced 15,542 tons of ore, worth £39,631, and in 1861, 15,770 tons of ore, worth £31,112; the increase in the tons of ore being 218 tons, and the decrease in the value £8,519. Our importations of zinc were—in 1860, 28,784 tons, and in 1861, 24,852 tons.

PYRITES—SULPHUR ORES.—In 1861 there were produced from the mines of the United Kingdom 125,135 tons, whereas in 1860 the production amounted to 135,669 tons; the sulphur ores imported during the past year amounting to 93,528 tons.

IRON.—The quantity of iron ore raised and used in the furnaces of the United Kingdom during the year ending December, 1861, was 7,215,532 tons, valued at £2,302,371; in 1860, 8,024,205 tons were raised.

The Pig-Iron produced in 1861 amounted to the large quantity of 3,712,390 tons, it being 3,826,752 tons in 1860. In 1861 the value of the pig-iron produced, at the place of production, was given as £11,480,256. There are reasons for believing that this was estimated at too high a price per ton, especially for the large production of the inferior irons. This has been corrected as far as possible, and the estimate now made gives the value of the pig-iron as £9,280,975. During the present year

means have been adopted for obtaining, as it is believed, with yet more correctness the cost of producing iron in all the districts.

COALS.—The rate of exhaustion which is going on over our coal fields still increases. From 3,052 collieries there was used and sold in 1861, 83,635,214 tons; 2,500,000 tons were wasted in the process of working, and burnt at surface on the collieries of Durham and Northumberland only. The total waste must, therefore, have been very large, although information thereof could not be correctly obtained.

General Summary, of which Returns are given for 1861:

Minerals.	Quantity	Value.
Tin.....Tons	11,640	£ 725,560
Copper.....Tons	231,487	1,427,215
Lead.....Tons	90,696	1,236,749
Silver Ore.....Tons	29	1,471
Zinc Ore.....Tons	15,770	31,113
Pyrites.....Tons	125,135	79,715
Arsenic.....Tons	1,410	10,875
Nickel.....Tons	16	24
Wolfram.....Tons	6	29
Antimony.....Tons	15	45
Manganese.....Tons	925	2,925
Sundries—Gossau, Ochre etc.	7,016	7,016
Iron Ore.....Tons	7,215,532	2,302,371
Coals (sold and used).....Tons	83,635,214	20,968,803
Other Minerals.....Tons	3,222,662	£80,114

Total value of the minerals produced in 1861 £27,605,525

Metals produced from British Minerals.

Gold.....Ozs.	2,784	£ 10,816
Tin.....Tons	7,450	910,762
Copper.....Tons	15,231	1,572,490
Lead.....Tons	65,643	1,445,255
Silver.....Ozs.	569,530	144,161
Zinc.....Tons	4,445	79,101
Iron, Pig.....Tons	3,712,390	9,280,975

Total value of the above..... £13,443,550

Estimated value of other metals..... 2 6 5 0

Coals..... 20 9 8 402

Total value of metals produced, and coals.. £34,602,833

As compared with the produce of American mines, the above summary of total mineral productions of Great Britain is quite insignificant, but little exceeding the production of gold alone in our California. Were the mineral wealth of our country developed in the same proportion as that of Great Britain, we could supply the necessities of the world, and then have a large surplus to spare.

IMPORTANT TO RAILROAD PASSENGERS AND CONDUCTORS.—A case was recently tried in Cambria county, Pennsylvania, the decision of which is of importance to the traveling public and to railroad conductors. The facts of the case are few and easily stated. A passenger, who wished to ride from Johnstown to Huntingdon, attempted to purchase a ticket at the office, offering a five dollar bill which the ticket agent could not change. The passenger then took the train, offering the same note, which the conductor received, for the purpose of examining its genuineness. After a time the conductor returned the note, stating that he believed it to be a counterfeit. It turned out, however, that it was a genuine note on the Delaware City Bank. Conductor Green then told the passenger, that unless he could pay with other money, he would have to put him off the train at the next station. He manifested some unwillingness to go, but was required to leave the cars, and was left off at Willmore Station. He then indicted the conductor for assault and battery. The Judge held, that if conductors require it of the passenger, he, the passenger, is bound to make the change; that the conductor is not bound to take the fare out of a note larger in amount, and furnish change to a passenger; that what

occurred in this case, in reference to the five dollar note, was not a payment of fare, and that, if the passenger did not produce a ticket, or pay his fare in the cars, the conductor had a right to eject him from the cars, using no more force in doing so than was necessary. The jury acquitted the conductor.

SORGHUM IN THE UNITED STATES.

THE AMOUNT MANUFACTURED IN THE VARIOUS STATES IN 1860.—In the preliminary report of the Census of the United States, recently issued by Mr. Kennedy, Superintendent, we find some figures developing the amount of sorghum syrup manufactured in the United States during the year 1860, which we think will interest the reader: It will be seen by the table which we publish below, that the amount reaches over 7,000,000 of gallons, nearly half as much as the entire crop of Southern sugar cane made in the same year. It will be observed—which incident we think will be new to our readers—that considerable amounts of the Chinese sugar cane syrup were made in the Southern States—103,450 gallons in Georgia, 365,861 in Kentucky, 263,475 in North Carolina, 51,041 in South Carolina, 485,828 in Tennessee, 115,051 in Texas, etc. Another fact is also worthy of particular notice, and that is that the State of Iowa, in 1860, or rather in 1859, manufactured as much sorghum syrup as the estimated product of Illinois the past year. It is said that "figures can not lie." We hope they can't, but still we have our doubts in those Iowa figures. The census report is as follows, as to the amount of the three products named, in 1860:

	Cane Syrup, 1860.	Sorghum Syrup, '60	Maple Sugar, '60.
Alabama.....	81,694	67,172	115,673
Arkansas.....	.....	100	.....
California.....	.....	391	2,777
Connecticut.....	761	853	.....
Delaware.....	433,800	.....	20
Florida.....	396,770	161,450	21,421
Georgia.....	.....	797,695	203,024
Illinois.....	.....	527,777	97,751
Indiana.....	.....	1,993,474	2
Iowa.....	.....	79,482	130,036
Kansas.....	.....	365,461	66,470
Kentucky.....	14,335,137	862	2,404
Louisiana.....	45	266,509	384,521
Maine.....	.....	14,974	21,829
Michigan.....	.....	8,207	1,299
Minnesota.....	.....	776,101	3,098
Mississippi.....	22,305	360	31,611
Missouri.....	36	265	17,759
New Jersey.....	15	707,416	392,932
New York.....	12,494	419	127,435
North Carolina.....	.....	9,605	5
Ohio.....	.....	15	51,041
Oregon.....	.....	51,041	6,754
Pennsylvania.....	15	485,828	3,600
Rhode Island.....	15,144	115,051	100,139
South Carolina.....	594,322	221,017	89,603
Tennessee.....	358,937	19,252	20
Texas.....	30	23,175	275
Virginia.....	.....	4,369	.....
Wisconsin.....	.....	32,500	.....
Wyoming.....	.....	.....	.....
Utah.....	58	.....	.....
Total.....	16,337,080	7,235,025	1,944,305

GREAT WESTERN RAILWAY.—The following is the traffic for the week ending 12th of December, 1862:

Passengers.....	\$18,010 39
Freight and live stock.....	42,658 78
Mails and sundries.....	1,327 31
Total.....	\$61,996 48
Corresponding week of last year.....	52,800 40
Increase.....	\$ 9,196 08

There is an immense amount of freight passing over this road. We are informed that two or more special trains leave the depot at

Hamilton every day. The great bulk of the freight is live stock, principally swine.

MICHIGAN CENTRAL EARNINGS.—The earnings of the Michigan Central Railroad, for the month of November, were:

1862.....	\$707,474 61
1861.....	242,089 13
Increase.....	\$ 65,387 48

The conductors of the Toledo and Wabash Railroad have struck for their present rate of pay, \$50 per month. The company wanted to change the scale of wages to \$2 per trip, pretending that it would increase the compensation; but the conductors "didn't see it."

MISSISSIPPI & MISSOURI R. R.—The completion of this road from Chicago, Ill., to Council Bluffs, Iowa, will make it one of the best paying roads in the country. The *Davenport News* says:

The work of extending this road is progressing as rapidly as possible. Sufficient iron has been shipped from New York to lay the track about ten miles—more than half way from Brooklyn to Grinnell—and the road bed and bridges are about completed.

The road is doing first rate business—better than ever before. Take, for instance, the present month; the stock trains have been heavy. For the past three weeks the average number of loaded freight cars each day going East has been *twenty five*, making four hundred and fifty cars this month. The general travel, saying nothing of soldier travel, is very fair and constantly increasing. All the cars of the company are employed, and more too. The road has eight or nine locomotives constantly employed.

At the company's shops, in this city, all is bustle and activity. There are about fifty men employed in repairing cars and locomotives, and other work appertaining to the road. There are three locomotives being repaired, and when they are completed, which will be in a few weeks, every engine on the road will be just about as good as when new. Mr. Kimball, the Assistant Superintendent, informs us that the prospects of the road are encouraging. It is being run on the most economical basis, and only wants a little lengthening out every month or so to be one of the leading institutions of the Western States.

A CHANGE.—The Quincy & Chicago road have made arrangements by which they deliver their freight to the Hannibal & St. Joseph road at Palmyra Junction, instead of at Hannibal as heretofore. The interests of the Q. & C. railroad are represented at that place by J. P. Hull, who had charge of the books of the Blackhawk and Fannie the past summer. Mr. Hull is competent and faithful, and we have no doubt but he will fulfill the arduous duties he has been called to perform, in a satisfactory manner.

Mr. Hull has resigned his position as cashier of the Q. & P. R. R., and is succeeded by Captain Bloom, who for a long time has been employed in the freight office of the Q. & C. R. R., and from his long experience in railroad matters, cannot but prove a capable and efficient officer.—*Quincy Republican*.

A RAILWAY has been built in New Zealand about fourteen miles in length, rising in that distance 2,800 feet.

IMPROVEMENTS AT PEORIA.—The Peoria & Bureau Valley Railroad Co., (says the *Transcript*.) are now erecting, at Peoria, a splendid and commodious depot and freight house, with an elevator attached, so that wheat, corn, oats, and other grains, can be transferred direct from canal boats to the cars.

This will in fact be making Peoria the head of navigation on the Illinois river. The Illinois river packet company are concerned in the transaction, and will, as soon as the river opens in the spring, have a line of new and fast boats between Peoria and St. Louis, running fast enough to carry passengers to St. Louis and other points, thus competing with the railroads in time and speed.

We are also informed that the Logansport, Peoria & Burlington road are about making an arrangement to extend their road through Fulton county to some point on the Mississippi river.

MONETARY & COMMERCIAL.

There has been nothing very remarkable to disturb the quiet of Third street during the past week. Considerable attention has been devoted to the holidays, and good feelings generally have been prevalent. There has been an abundant supply of currency, and money has ruled easy at the usual rates.

Exchange is dull with a light demand at rates heretofore quoted.

	Buying.	Selling.
New York.....	1/2 @ 1/2 dis.	par
Philadelphia.....	1/2 @ 1/2 dis.	par
Boston.....	1/2 @ 1/2 dis.	par
Baltimore.....	1/2 @ 1/2 dis.	par
Gold.....	31 @ 32 prem.	33 @ 34 prem.
Silver.....	17 @ 32 prem.	25 @ 26 prem.
Demand Notes.....	35 prem.	.....

The operations of the Hog Market we take from the *Price Current*.

The receipts during the week, the season, and for some previous seasons, comparatively were as follows:

By railroads.....	38,714
By river.....	67
From Kentucky.....	1,200
Driven in.....	1,200
Slaughtered at Plainville and Newtown.....	2,600
Total for the week.....	41,781
Previously reported.....	413,917

Total for the season.....	479,694
Same time in 1861.....	313,841
" " 1860.....	300,077
" " 1859.....	404,126
" " 1858.....	316,878
" " 1857.....	302,698
" " 1856.....	328,855
" " 1855.....	313,702
" " 1854.....	328,885
" " 1853.....	273,665
" " 1852.....	326,341
" " 1851.....	344,188
" " 1850.....	311,592
" " 1849.....	288,266

The total footing up the present week shows that the receipts are close on to 420,000, which is about 5,000 more than were ever packed here in any previous season, and is 6,000 more than were packed here last season.

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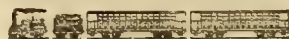
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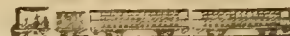
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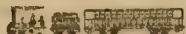
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For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Jan 6. CHARLES MINOT, *Gen'l Sup't*

J. W. MORRILL. G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

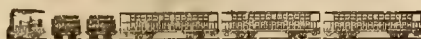
Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material. Orders respectfully solicited, with the assurance that they will be executed to the satisfaction of all.

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM

PITTSBURGH to PHILADELPHIA

(with close connections from Western Cities.)

ALL CONNECTING DIRECT TO NEW YORK.

**THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.**

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (430 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM

PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.

BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freight of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburgh.

CLARKE & CO., Transfer Agents, Pittsburgh.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

W. W. AIKMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.

CLARKE & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

G. B. NEAL, Parkersburg, Virginia.

HALL & CO., Marietta, Ohio.

H. S. PIERCE & CO., Zanesville, Ohio.

McDOWELL & McCORM, Portsmouth, Ohio.

R. McNEELY, Maysville, Ky.

J. P. JOHNSTON, Ripley, Ohio.

JOHN TODD, Covington, Ky.

G. L. HEATON, Cleveland, Ohio.

R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—(via Allentown)—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.

L. L. HOUGHT, Gen'l Ticket Agent, Philadelphia.

H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	9:20 P. M.
Mail and Express.....	8:30 A. M.	6:20 P. M.
Columbus Accommodation.....	4:00 P. M.	11:05 A. M.
Morrow Accommodation.....	6:00 P. M.	8:05 A. M.

Cincinnati Hamilton and Dayton

RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE
Dayton and Sandusky Mail.....	7:30 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	7:00 A. M.	11:40 P. M.
Cin. & Chicago Air-Line Ex.....	8:00 A. M.	8:50 P. M.
Dayton and Richmond.....	3:15 P. M.	1:30 P. M.
Day., Toledo & Detroit Huntsville.....	5:20 P. M.	1:15 A. M.
Cin & Chicago Air Line Ex.....	7:00 P. M.	8:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:50
Eastern Night Express.....	10:00 P. M.	7:40 A. M.

The Eastern Night Express leaves Sunday Night in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	5:00 A. M.	12:20 P. M.
Indianapolis and Terre Haute.....	5:00 A. M.	12:20 P. M.
Decatur, Springfield & Quincy.....	12:45 A. M.	4:45 P. M.
Chicago Night Express.....	5:00 P. M.	10:40 A. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	6:15 A. M.	10:00 P. M.
Louisville and St. Louis Night Ex.....	7:10 P. M.	7:20 A. M.
One through train for Louisville and St. Louis Sunday evenings.		

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES slower than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Barnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omni-buses call for passengers as usual.

P. W. STRADER,
General Ticket Agent L. M. & C. X., and C. H. & D. Railroads.

W. H. L. NOBLE,
General Ticket Agent Indianapolis & Cincinnati Railroad.

E. F. FULLER,
General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT RE
NEW YORK

ALBERT BRIDGES.

CORNER

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES
Tube CLEANERS, Steel Wire and Whalebone BRUSH-

Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enamelled Iron WATER PIPE.
Wrought Iron GAS and STEAM PIPE.
Wrought Iron HOT WATER APPARATUS, for warm-
ing Horticultural Buildings.
Ventilating do for dwelling Houses, &c.
HOT WATER GAS STOVES, for Plant Windows, Piaz-
za Greenhouses, Offices, &c.

KRUPP'S CAST STEEL

RAILWAY AXLES & TIRES.
Steel for Rolls, Dies, Tools, Cannon &c. &c.
THOS. PROSSER & SON,
28 Platt Street, New York

N. W. BALDWIN, MATHEW BAIRD.
M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of
LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in *efficiency, economy and durability*, they will compare favorably with those of any other kind in use. We also furnish to order Wheels Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned
THEODORE DEHON,
no 1 10 Wal Broadway, New York

EDWIN J. HORNER,

SUCCESSOR TO

McDANIEL & HORNER,



**LOCOMOTIVE & RAILROAD
CAR SPRING**
MANUFACTURER,
WILMINGTON, : DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky.,	Columbus, O.,
Lafayette, Ind.,	Dayton, O.,
Indianapolis, Ind.,	Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE ON BOTH SIDES, impossible to ravel, and leaving no chain or ridge on the underside, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

If Send or call for a circular, containing all particulars, prices, testimonials, etc.
Feb 12.

WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

—AND—

Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Sot. 2. MOSELEY & CO.

JAMES FOSTER, Jr. & CO.,
MATHEMATICAL AND PHILOSOPHIC-
AL INSTRUMENT MAKERS,
S.W. CORNER FIFTH AND RACE,
Cincinnati, Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

H. TWITHELL,

JAMES FOSTER, Jr.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co. Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
Ag. 4. m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,
Engine and Car Axles, Pump and Piston Rods
Bar of all Sizes.
And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works
June 9.

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, President.

WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1½ to 10 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from ½ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—from 1 to 24 inches diameter, and branches for same. &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS,	CHAR. WHEELER,
THOS. T. TASKER, JR.,	S. P. M. TASKER,
HY. G. MORRIS.	

BUTLER'S

MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroads for the South and West. For sale by 1,000 leading Dealers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, JANUARY 8, 1863.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.
One square, single insertion..... \$1 00
" " per month..... 3 00
" " six months..... 12 00
" " per annum..... 20 00
" column, single insertion..... 5 00
" " per month..... 10 00
" " six months..... 40 00
" " per annum..... 80 00
" page, single insertion..... 15 00
" " per month..... 25 00
" " six months..... 110 00
" " per annum..... 200 00
Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to

WRIGHTSON & CO.,

Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	9.20 P. M.
Mail and Express.....	8.20 A. M.	6.20 P. M.
Columbus Accommodation.....	4.00 P. M.	11.05 A. M.
Morrow Accommodation.....	6.00 P. M.	8.05 A. M.

Cincinnati, Hamilton & Dayton—

Cin. & Chicago Air Line.....	8.00 A. M.	8.50 P. M.
Dayton & Sandusky.....	7.00 A. M.	6.45 P. M.
Dayton & Toledo.....	7.00 A. M.	11.40 P. M.
Richmond & Dayton.....	3.15 P. M.	1.50 P. M.

Dayton, Lima, Toledo & Huntsville—

Cin. & Chicago Air Line Exp.....	7.00 P. M.	10.55 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.50 A. M.
Eastern Night Express.....	10.00 P. M.	7.10 A. M.

Sandusky, Dayton & Cincinnati—

Morning Express.....	7.00 A. M.	6.45 P. M.
Bellevue Accommodation.....	5.20 P. M.	10.55 A. M.

Marietta & Cincinnati—

Mail.....	7.45 A. M.	5.25 P. M.
Accommodation.....	3.30 P. M.	9.55 A. M.

Ohio & Mississippi—

Mail.....	6.15 A. M.	10.00 P. M.
Express.....	7.00 P. M.	7.10 A. M.

Indianapolis & Cincinnati—

Mail.....	5.00 A. M.	12.20 A. M.
Chicago Express.....	5.00 P. M.	10.40 A. M.

Dayton & Michigan—

Tol. & Detroit & Chicago Exp.....	7.00 A. M.	11.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.55 A. M.

Cincinnati & Chicago Air Line—

Mail and Express.....	8.00 A. M.	8.50 P. M.
Night Express.....	7.00 P. M.	8.10 A. M.

Cincinnati, Wilmington & Zanesville—

Morning Express.....	8.30 A. M.	6.45 P. M.
Accommodation.....	6.00 P. M.	8.20 A. M.

Kentucky Central— (City time.)

First Train.....	6.45 A. M.	10.37 A. M.
Second Train.....	2.10 P. M.	6.30 P. M.

The trains on the Little Miami and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

THE YEAR THAT IS PAST.

The Railroad system of Ohio is very nearly completed. Its great important lines are running in every direction. From East to West we have the Lake Shore Line, the Pittsburgh, Fort Wayne and Chicago Line; the Bellefontaine and Indianapolis Line; the Central Ohio Line; and the Marietta Line. From North to South we have the Dayton and Michigan Line; the Sandusky, Dayton and Cincinnati Line; and the Cleveland, Columbus and Cincinnati Line. These with their various branches and connections form several diagonal lines from South-West to North-East. While it is worthy of remark that there is not a single line traversing the whole State in a diagonal direction from South-East to North-West. The reason of this is, that Cincinnati, the great commercial city of the State, is also the great commercial emporium of the whole Ohio Valley, and the lines from this city to the North-West all run through the adjoining state of Indiana, and have a very short link only in the South-Western corner of Ohio.

Our system, therefore, being so nearly completed there has been but little new work done in constructing railroads during the past year. But the year 1862 will ever be remembered in Railroading as one of the most prosperous that has been known. A year ago when we predicted that Railroad property would be among the best investments that could be had, our opinions were regarded by some as visionary, by others as savoring much of the shop, and by all with considerable distrust. War was devastating a large portion of country from which our railroads derived much business. Internal commerce was interrupted in its channels, and, to a superficial observer, it looked very much as though the ordinary channels of exchange had seen their best days, and that a new order of things must be established, based more upon home production and home consumption than upon interchange of commodities and active internal commerce. The year has passed and our predictions have been verified by results. Railroads never earned so much in the same time in the whole course of their existence as they have during this much dreaded year. Railroad stocks and bonds never were regarded with so much favor, and very justly, because they have demonstrated their value by actual earnings. They never have sold so high as they do now; the stocks of all roads that have a shadow of basis, and even of those whose debts have grown so large as to overshadow their stock completely and preclude the idea of a possible dividend for years to come, are all eagerly sought for and change owners readily at very liberal prices. We say, therefore, the year 1862 must be regarded as a very satisfactory year in railroading.

For the future there is yet some work to do

that is really needed to complete the grand system so well begun and so nearly finished. There is a line designed to run from Cincinnati northward through the centre of Michigan to Mackinaw Straits, and another designed to follow the same general direction, but nearer the lake on the West. Something has been done towards both these lines, but much remains to be done. They will, however, depend for their final completion on the necessities of the country through which their most northern links must pass. The Marietta Line has yet to be completed to Wheeling, and the Atlantic and Great Western Line carried through to Cincinnati; they have this line about completed to Ravenna. Another line has been proposed to extend the Indiana Central from a point near the State line to Columbus, as an independent road. Surveys have been made on this line and some grading done, but we are at a loss to see what will be gained by it. The Dayton Short Line or Tunnel Road remains as yet in statu quo; its managers do not seem to have vitality enough to print a report. The Little Miami and Cincinnati, Hamilton & Dayton Railroads should buy the property and complete the Tunnel, as an accommodation to themselves. The Indianapolis and Cincinnati are busy making their independent line into Cincinnati which will soon be completed. The Fremont & Indiana, the Cleveland, Pittsburgh and Cincinnati, and several shorter lines which have been proposed, are not doing anything at the present time. We would suggest to the managers of these enterprises that now is as favorable a time as they may expect for some years to come, and if the sections through which they are to pass cannot furnish the means to justify a continuance of work on the lines as soon as labor is again abundant, it may be considered problematical whether they will be able to do so in this decade.

LITTLE MIAMI AND COLUMBUS & XENIA R. R.

These companies have just held their annual meeting in this city. From the statement made to the stockholders, the following are the results of operation during the year:

FINANCIAL STATEMENT.

Gross earnings for the year ending Nov. 30 1862	\$1,562,573 90
Working expenses.....	776,628 40
Net earnings.....	\$785,945 50
Add dividends on Little Miami & Columbus & Xenia R. R. stocks owned by Co's....	69,914 00
	855,859 50
Less interest.....	164,209 92
Net income.....	\$689,649 58

Which is about 15.43 per cent of the entire capital stock of both companies.

The above figures are as nearly exact as can be obtained at the present. They may be subject to some slight modifications on the settlement with other companies.

The earnings of the seven years have been as follows:

	Earnings.	Working Expenses.
Year ending Dec. 1856.....	\$1,209,636 00.....	\$562,675 41
" " 1857.....	1,163,162 59.....	645,561 12
" " 1858.....	1,200,499 29.....	579,235 31
" " 1859.....	1,276,754 73.....	688,561 40
" " 1860.....	1,299,844 84.....	693,313 29
" " 1861.....	1,298,503 02.....	664,443 28
" " 1862.....	1,562,573 90.....	778,628 40

The officers of the two companies for the ensuing year are as follows:

The Little Miami Railroad Company for 1862, elected Dec., 1862.—Wm. H. Clement, *President*; D. G. A. Davenport, *Auditor*; Chas. H. Kilgour, *Sec'y*; S. E. Wright, *Treasurer*; E. W. Woodward, *Superintendent*.

Directors:—Jos. C. Butler, Joseph Torrence, Nathaniel Wright, James Hicks, Jr., Larz Anderson, W. H. Clement, Alphonso Taft, Chas. H. Kilgour, Henry Hanna, Cincinnati; John Bacon, Springfield; Abraham Hivling, Xenia; Joseph R. Swan, Columbus.

The Columbus & Xenia Railroad Co. for 1862, elected January, 1862.—Jos. R. Swan, *Pres't*; W. H. Clement, *Vice President*; E. W. Woodward, *Superintendent*; Cyrus Fay, *Secretary and Treasurer*.

Directors:—Wm. Dennison, Jr., Robert Neil, D. W. Deshler, L. Goodale, Wm. B. Hubbard, Jos. R. Swan, Geo. M. Parsons, Columbus; W. H. Clement, Larz Anderson, Henry Hanna, Cincinnati; Abraham Hivling, Xenia; Simon Gebhart, Dayton.

BUFFALO, NEW YORK AND ERIE RAILROAD.

The fourth annual report of this company, embracing the fiscal year ending September 30, 1862, is published. From the report we learn that the receipts for the year were:

RECEIPTS.

From passengers.....	\$135,879 96
" freight.....	651,468 45
" mails.....	6,530 00
" express.....	9,954 45
" Rochester division.....	6,416 63
" other sources.....	11,193 49
	\$823,435 28

EXPENSES.

Operating the road.....	\$240,317 81
Maintaining road.....	211,593 31
Repairs of machinery.....	100,028 05
	547,939 17
Leaving net earnings.....	\$275,496 11
Add balance Oct. 1st, 1861.....	79,112 64
	\$354,598 75
Coupons and interest paid.....	163,867 19
Balance Sept. 30, 1862.....	\$190,731 56
Compared with the previous year, the gross earnings show an increase of.....	\$229,580 66
With an increase in expenses of.....	141,799 14
Making the increase in net earnings.....	\$87,781 52

There has been paid, and charged into the the expenses of the year, \$17,101 52 for taxes and damages which accrued in and belonged to the expenses of previous years.

Besides the ordinary repairs to the track, a considerable portion has been reconstructed during the year, at an expense for new rails of \$48,612 49; 2,975 tons of old rails have been repaired at an average cost of \$4 39 per ton; 37 129 ties, 191,600 lbs. spikes, and 28,738 chairs have been used in reconstruction and repairs of track, at a cost of \$31,248 12. The repairs to roadway and track, in new superstructure, ballasting and ditching have

been thorough and extensive, and in this respect the property of the company is increased in actual value by more than the difference in the expenses of the past over those of the preceding year.

Ten bridges, of an aggregate length of 844 feet, have been constructed during the year entirely of new material and in a substantial manner—the entire cost of which has been charged to expense account. All the other bridges have been thoroughly repaired.

The largely increased cost of materials occasioned by the existing war, and the derangement of the currency, has added essentially to the expenses of the year. A still further increase in the cost of materials and labor is anticipated the ensuing year.

An analysis of the accounts for the year show the following results:

Surplus earnings for the year.....	\$111,618 92
Increase of funded debt.....	14,180 00
Decrease of cash on hand.....	4,335 04
" bills receivable.....	358 45
Decrease of amount due from War and Post Office Department.....	2,254 40
	\$132,946 81
Reduction of floating debt.....	\$76,524 17
Increase of materials on hand.....	12,250 48
Increase of real estate and buildings.....	20,914 20
Increase of amount due from agents, etc.....	23,257 96
	\$132,946 81

Since the last report, the company has purchased the lot adjoining its freight depot on Buffalo Creek, thus giving a dock front on the creek of 326 feet, together with a dock front of 210 feet on the ship canal, leading to the Ohio Basin. The cost of which, together with the extension of the freight depot, rendered necessary by the increasing freight business of the company, amounting to \$23,683 94, has been charged to cost of road and equipments, and appears in the foregoing statement.

The following table will show the earnings and expenses of the road from its organization to the present time:

	Total earnings.	Total exps.	Interest pay't.	Surplus earnings.
1857-58.....	\$474,779	\$334,192	\$1,490	\$141,087
1858-59.....	541,250	368,928	150,224	22,097
1859-60.....	580,000	337,046	121,416	61,538
1860-61.....	593,845	403,140	163,324	24,300
1861-62.....	823,425	547,939	163,867	111,619

The total surplus earnings have been as follows:

Construction of road from Attica to Batavia.....	\$128,504
New rolling stock.....	44,735
Real estate, buildings and new track.....	96,821
Extraordinary repairs to track between Buffalo and Attica upon opening through line.....	23,990
New bridges over Conchocton river.....	13,070
Telegraph line from Attica to Corning.....	3,381
Legal expenses attending organization of the company and perfecting titles.....	5,669
Patent rights.....	4,293
Excess of assets over liabilities.....	38,670
	\$360,731

These expenditures constituted the floating debt of the company, immediately or soon after its organization. The various items belonged and were charged to cost of road and equipment, and are represented in the capital of the company. The debt thus created has been entirely paid out of the surplus earnings. The company has no floating debt. What is represented in the ledger accounts as floating

debt are balances of running monthly accounts, fluctuating from month to month, the dues to the company on similar accounts being sufficient for their liquidation. The report says:

The experiment of using coal for fuel on the locomotive engines of the company shows a very favorable result. The total miles run by all trains during the year was 609,076—of which 188,690 were by coal burning engines. The expenditures for fuel used on different classes of engines have been carefully kept, and present the following result:

Expense per mile with wood.....	10 30-100
do do do coal.....	5 33-100
Difference per mile in favor of coal.....	4 97-100

Making a saving in 188,690 miles run by coal engines of \$9,371 61.

It is proper to state, however, that the engines using coal were run principally on passenger trains, and that if coal were substituted for wood on all the engines of the company, the per centage of saving in expense would be below that above stated.

It is probable that coal-burning engines will deteriorate more rapidly than those using wood fuel, owing to the occasional presence of sulphur and other impure substances in the coal used; but making due allowance for deterioration from this cause, the experience of the company thus far indicates, that a large saving is made by the use of coal. The average quantity consumed per mile on all trains is 47 lbs.

The business of the company requires a large addition to its engines and cars, the expense of which would be soon repaid by additional earnings.

The coal traffic for the year amounted to 58,578 tons. In 1861 it was 45,578. In 1860, 20,000. In 1859, 9,100. The quantity offered for transportation the past year exceeded 100,000 tons, but it was not deemed profitable to engage in the business any further than to load return cars not otherwise filled with Western bound freight.

The total tonnage of freight transported by the company since its organization, with the rate received therefor, has been as follows:

1858.....	143,709 tons, Average rate \$2 11 per ton.
1859.....	181,568 " " 2.05 "
1860.....	237,713 " " 1.85 "
1861.....	237,409 " " 1.85 "
1862.....	301,234 " " 2.12 "

GENERAL STATEMENT.

Cost of road and equipment.....	\$3,188,461 16
First mortgage bonds on hand, to liquidate Buffalo and N. Y. City R. R. bonds.....	79,860 00

ASSETS, as follows:

Avon, Gen. and Mt. Morris R. R. stock.....	\$1,200 00
Rochester and Gen. Valley R. R. stock.....	149,940 00
Quincy and Toledo R. R. bonds and stock.....	9,080 00
B. and N. Y. C. R. R. coupons, (Buff. to Attica).....	427 59
Buffalo, New York and Erie R. R. bonds.....	45,740 00
Inventory of materials.....	100,254 57
Cash on hand and in banks.....	1,673 89
Due from agents (since remitted).....	38,714 08
Bills receivable.....	3,159 75
Other roads.....	8,783 87
Individual accounts.....	46,506 95
Post Office Department.....	4 08 88
War Department.....	5,000 00

414,531 59

\$3,682,852 47

Capital stock.....	\$850,000
First mortgage bonds.....	\$2,000,000 00
Second ".....	300,000 00
Real estate.....	46,713 72
	2,426,713 72
First mortgage, B. & N. Y. C. R. R. Buffalo to Attica.....	79,860 00
Bills payable.....	\$ 14,560 54
Pay rolls.....	30,752 72
Other roads.....	22,041 74
Individual accounts.....	42,190 48
	135,547 56
Balance of income account.....	190,231 56
	\$3,682,852 74

The road is 142 in length, extending from Buffalo to Corning. The equipment of the road consists of 28 locomotives; 26 first class, 6 second class, 9 baggage and mail, and 393 freight cars. Miles run by passenger trains, 241,882; by freight trains, 330,925; by working trains, 36,269—total mileage, 609,076. Through passengers, 15,516; local do., 181,978. Through freight, 173,939 tons; local do., 127,275. The expenses per mile run have been as follows: Fuel, 8.76 cents; oil and waste, 3; maintaining road, 34.74; operating road, 37.81; repairs to machinery, 17.40. The expenses of the road were 66½ per cent of the earnings.

RAILROAD DECISION.

INJUNCTION AGAINST THE DIRECTORS OF THE CINCINNATI STREET RAILROAD COMPANY.—*Motion to Dissolve*—John O. Clarke vs. The Cincinnati Street Railroad Company, C. H. Kilgour and others. Judge Storer heard a motion to dissolve an injunction in this case. The action, as stated by Mr. Pugh, (who, with Mr. Tait, appeared for the defendants in the present motion,) was brought against the corporation by name, and the members of the Board of Directors. The plaintiff, in his petition, represents that he is a stockholder, and prosecutes the action for the benefit of other stockholders as well as himself. That prior to the 1st of December, 1861, and from that time the company was indebted in the sum of about \$100,000; that a majority of the stockholders on the 18th of the same month signed a paper empowering the directors to carry into effect any scheme that might be deemed proper, to relieve the company by the issue of preferred stock, or bonds, or otherwise; that on the 17th of January, 1862, the directors resolved that the stock should be reduced one half, that new subscriptions should be received sufficient to liquidate the debt; and, that in the event of a failure, bonds should be issued.

That on the 27th of January a number of the stockholders by resolution empowered the directors to issue bonds, and agreed that the management of the affairs of the company should, for five years, and until the bonds should be paid, be vested in the defendants, J. L. Stettinius, C. J. W. Smith and C. H. Kilgour, as trustees, who have since controlled the same.

That while these parties had sole charge, responsible individuals offered to subscribe, and pay in cash, to so much of the stock as was necessary to pay the debt; and though Smith insisted on its acceptance as for the interest of every one connected with the company, Kilgour and Stettinius refused to assent, but the latter said he would unite with if Kilgour did not take the stock, or procure it to be taken on the next day.

That soon after this, Kilgour professed to

be ready to subscribe in an amount sufficient to pay the debts, and signed a paper for such subscription, but did not take the stock nor pay for the same, and now claims that his agreement was only to take stock, or bonds of the company, at his option, and prefers not to take more than a small amount of stock.

That Kilgour has procured the assent of a majority of the directors to the issue of bonds, convertible into stock at the option of the holder, and that said bonds, prepared under the direction of said Kilgour, are to be hurriedly disposed of unless the sale shall be restrained by the court.

That it has been his (Kilgour's) design, since his connection with the company, to manage its affairs for his private benefit, to get sufficient stock for himself and friends as would control the directory, and then to hold the bonds, so that if the speculation proved unfavorable, the old stock could be extinguished by a sale of property under proceedings on the bonds; and, in another event, the bonds could be converted into stock.

The plaintiff, therefore, asks that the defendants may be restrained from the issue or sale of any bonds; that the pretended trust may be declared void, and the directors be required to open books for subscription.

SUPPLEMENTAL PETITION.—In this petition the plaintiff represents that the company, after consultation, had concluded that money could be raised to meet the indebtedness on terms more advantageous to the company and stockholders, than either by a sale of bonds or of additional stock, and that a majority of the stockholders are averse to the sale of either; but that the defendants, Kilgour and a majority of the directors, to control the affairs of the company, propose to sell at private sale to themselves and friends, stock sufficient to hold with that which they already control, the election of directors, all of which would work great injury to the company and its stockholders, and benefit none except those who are endeavoring to manage the company's affairs for their own private purposes; and in this supplementary petition it is asked that defendants be restrained as well from the sale of stock and the issue of certificates, except in lieu of old certificates surrendered, and from the receipt of subscriptions, and from entering into contract on the part of the company for the sale of stock or bonds.

An answer was filed to the petition, but the defendants' counsel stated that they were willing the motion should be heard on the petition alone.

Mr. Pugh drew attention to the agreement set out in this petition—in the face of which the court was asked to restrain Mr. Kilgour from receiving those bonds, and the directors from granting them, by those parties who made that contract, and who found after it was executed, and the rights of a third person had intervened, that they could make a better bargain—was there any doubt of the validity of such an agreement? He did not now urge the proposition that it would be valid if made by the directors alone, but it was made with the written consent of a majority of the stockholders.

The plaintiff says Mr. Kilgour merely signed a paper undertaking to subscribe, but that he did not take or pay for the stock. What then? Was he not liable for the whole amount of the subscription? There was no pretense that he was insolvent; and he (Mr. Pugh) contended that the agreement was binding on all the stockholders—those who signed the paper as well as those who did not.

Since the filing of the original petition "a large number of stockholders" concluded that the money could be raised "on terms more advantageous" than either by a sale of bonds or stocks, but he was at a loss to suppose by what better way they could pay their debts unless they issued "green-backs." Counsel then adverted to an inconsistency in the prayer of the original, and that of the supplemental petition, the object of the former being to compel the party to subscribe the stock—that of the second to prevent him; and it is averred his object is to gain a private advantage and control the company. Has not the majority a right to control? What right has Mr. Clark to complain if he is controlled by a majority of votes? The attempt here was to hold Mr. Kilgour responsible for \$100,000 of stock, and to use the process of this court in withholding from him his certificate of stock and his right of voting at the coming election of directors. There was nothing shown to impeach the consideration for that stock, and the defendant, therefore, asked that the restraining order should be dissolved.

Mr. Mitchell (on the other side) felt sorry that the answer of the defendants was not brought in, as it kept the court from entering on a rich field of exploration; and though the petition uncovered only an inch or two of the surface, there was enough to indicate the vista that must open when the research was prosecuted beyond this motion predicated on a single pleading. For they here find a director making a contract with himself, carrying it in his pocket, that is at one moment binding on the company, because he made it, and, at the next, neither binding on the company nor himself, because he canceled it.

Mr. Pugh inquired if there was any language in the record which authorized the counsel to speak of the paper being carried in any director's pocket.

Mr. Mitchell. It follows from other allegations. He did not blame the gentlemen on the other side for being restive, as they feel where the case pinches. The petition represents the designs of Mr. Kilgour to manage the affairs for his own private benefit, and in the language employed there was a plain allegation of palpable dishonesty. Counsel then proceeded to remark that the agreement was that stock should be taken in the first instance, and it was only in the event that it could not be obtained, that bonds were to be sold.

Mr. Kilgour, in disregard of this arrangement, when parties offer to pay in cash for the stock, declines—at one time saying he intended only to take stock, at another time bonds, and if it turns out that the stock should be of little value, he squelches out by being a creditor on his own notion—all tending to the inference that he intended not only to put the paper but the whole company in his pocket. No one denies the right of stockholders to vote, but who ever heard it claimed that a trustee or director had a right to do even a lawful act for the purpose of private emolument.

It was further contended by Mr. Mitchell that the directors had no power to create this trust, that the majority of the trustees acted in bad faith for Mr. Kilgour's private interest and that the latter procured the directors to pass resolutions in a hurried manner to force bonds into the community, and only for the action of the court irreparable injury would have been done.

As to the allegation that Mr. Kilgour ever made any contract with the directors, counsel insisted that he made no such contract, but

simply put his name to a piece of paper professing to subscribe.

Mr. Pugh—Is not that binding?

Mr. Mitchell—It is not, unless accepted.

Mr. Ferguson addressed the court on the same side—taking the position that it was to the interest of the public and the company that the road should be built and operated by the stockholders. 2nd. That Kilgour had made no binding contract of subscription to stock on bonds. He is and was only a creditor of the company, seeking how to turn his debt into stock. 3d. The original stockholders have a right to divide and apportion the remaining or surplus stock among themselves in proportion to the shares they already own. 4th. While it is true, that, generally, the control of the company will not be taken from the directors, equity will always interpose in case of fraud.

Mr. Taft made a lengthened argument in closing, on behalf of the defendants, elaborating several of the points relied on by his associate, and contending that no case had been made out by the plaintiffs.

The question is now under advisement.

DECISION OF THE CASE.

THE CINCINNATI STREET RAILROAD INJUNCTION PROCEEDING.—John O. Clark vs. The Directors of the Cincinnati Street Railroad Co. Judge Storer disposed of this case on application to dissolve an injunction on the ground that the petition shows no case for the allowance of the order. The plaintiff, one of the stockholders, complains that the franchisees etc., of the corporation are placed in peril by the defendants (Kilgour and others) acting as directors, or a committee of that body; he charges Kilgour with endeavoring to subvert his own interest instead of that of the road, and prays for a restraining order to prevent the issue and sale of bonds by these defendants, and that the books of the company be opened for new subscriptions.

In a supplemental petition it was alleged that the defendants, in view of the annual election soon to take place, were about to make private distribution of stock among themselves and friends, with the intention to elect a new board favorable to their own purposes, and a new restraining order was prayed. Both these orders were allowed, and it was now asked to dissolve the injunction in each case for the want of equity on the part of the plaintiffs to demand the interference of the court.

[The details of the petition were given in a former report.]

The Court remarked that all the allegations of the petition that were properly pleaded must be regarded as true; and, without admitting as a necessary consequence the implications made by plaintiff, they were permitted to follow out every fact stated to its legitimate result.

The right of the plaintiff as a stockholder was undisputed; and the settled law is that not only a stockholder in a corporation, but a tax-payer, in a city or county, may apply to a court of equity, when officers, public or private, are attempting to exercise legal power by which unlawful taxes may be levied, or corporate liability increased.

The defendants' counsel urge that the effect of the relief sought by the plaintiff would be to require a certain party named as defendant to execute a contract already made, and, at the same time, by the mode pursued, prevent him from performing his obligation.

It was admitted that defendant (K) had signed a paper agreeing to take a large

amount of stock, but it does not appear that it was ever delivered to the directors, accepted by them, or intended to be operative. It was, to give it the largest meaning, a proposition merely to subscribe, and it is doubtful, if accepted, whether either party could compel the other to carry it out.

The transfer of the control and management of the corporation and its effects by the directors to the three trustees, defendants, the Court regarded as a delegation of power and corporate duty, that, if ever allowed, would require an express assent of stockholders; and, even then, it was doubtful whether the policy of the law would sustain it; or that the transaction would be regarded with favor, unless explained, or made to appear in its real character by an exhibition of all the circumstances that induced it.

Admitting that the required amount of stock had been subscribed by Kilgour, another important question is, whether that transaction would be sustained by a court of equity. It was not denied that prior to the proposed subscription, responsible persons had offered to take the whole amount of stock to discharge the debts of the company, and this was declined—one of the trustees offering to subscribe himself the entire amount, thereby preventing all competition among existing stockholders, and securing a controlling interest, perhaps in the management of the corporate affairs.

In the late case of the York and North Midland Counties Railway Co vs. Hudson, (9 Eng. L. & E. 361) the Master of the Rolls held that the office of Director was one of trust—that when shares were placed at his disposal, he could not make private gain in the transaction. Various other authorities, English and American, were cited to show the modern doctrine to be that the director of a bank, insurance or railway company can not benefit himself by any private speculation on the stock—that a trustee can not, on behalf of himself, deal with a company in which he is a partner, or be allowed to enter into an agreement that may conflict with the interest of those he is bound by his fiduciary relation to protect.

The Court would not recognize such an arrangement without the express consent of the stockholders. Without such sanction, the directors had no power to make such transfer. It was unnecessary to give any opinion now on the question as to the power of the stockholders to lessen the amount of the stock, as that point was reserved; but it was intimated that in the case of the Society of Practical Knowledge vs. Abbot and others, (2d Bevan, 559) it was held that a company could not reduce its capital stock, unless there was an express grant of power in the charter.

If it is thought best to obtain private subscriptions the existing owners of stock should be consulted, and the opportunity given them to take the additional shares. These steps have not been pursued, and it must follow that any other arrangement between the directors and one of their number would not be sustained, either at law or in equity.

The supplemental petition is also unanswered. It states the fact of a purpose being formed by defendants, or some of them, to issue new stock among themselves and friends, to obtain a majority of the vote at the approaching election for directors, and asks this court to restrain the parties.

There could be no doubt of the power of the Court to make such an order. Such an election would be declared void on *quo warranto*; and, before it is held, the Court may forbid it by injunction.

As the case now stands, the Court felt bound to continue the restraining order until final hearing. Motion to dissolve overruled. Taft and Pugh for the motion; Mitchell and Ferguson contra.

"ON THE RAILWAY SYSTEM OF GERMANY."

By Mr. Robert Crawford, and read before the British Institution of Civil Engineers

It was stated that in Germany, as in England, tramways had formed the germ from which subsequent enterprise developed the vast network of railways now extending throughout the length and breadth of the land. The oldest of these undertakings originated in a fifty years' "privilege," granted by the Austrian government, upon the 7th of September, 1824, for the construction of a line from Budweiss, in Bohemia, to opposite Linz, on the Danube—a distance of upwards of 80 English miles. Subsequently a concession was obtained for a line from Linz to Gmunden, 42½ miles. The cost of the Budweiss, Linz and Gmunden line was about £4,877 per mile. The gauge was 3 feet 7½ inches, and it was worked by horses until 1854, when small locomotive engines were employed, first upon a portion of the line, and, in the following year, upon the entire length.

A proposal to adopt steam as a motive power, instead of horse labor, was carried into effect, for the first time in Germany, in the case of a railway, 4 miles in length, from Nuremberg to Furth, which was opened for public traffic on the 7th of December, 1835. Thus, Germany, possessing at the close of the year 1835, upwards of 108 miles of tramways, had, up to the same time, only four miles of railway, properly so called. In the five following years, railways were introduced into all parts of the country, so that, at the close of 1840, there were twelve railways, either wholly or in part finished, with a total length opened of 377 miles; by the close of 1860 to 8,512 miles; and at the end of 1861, a total of 8,866 miles had been constructed, at an average cost of £16,400 per mile. Nearly one-fourth of the entire length was provided with double lines of rails. About 38 per cent of the existing lines was Government property, 10½ per cent the property of Companies, but worked by Government, 51½ per cent the property of, and worked by, private or Joint Stock Companies. Further, it appeared, that 39½ per cent of the entire length was constructed by the different States; 24½ by Companies under a guarantee of interest, or a government subvention, and 35½ per cent by Companies at their own cost and risk; so that Government aid had been granted, directly or indirectly, to nearly two-thirds of the entire system. These 8,866 miles of railway comprises sixty-two undertakings, as at present constituted, under as many different organizations, and were managed by nineteen Government departments, and forty-three Boards of Directors.

At the close of the year 1861, Germany had, in addition to the railways, about 143 miles of tramways, constructed at an average cost of £3,200 per mile.

With a view of establishing a common plan of action, and of regulating to a certain extent the relations of the different railway companies with each other, a society was formed, in the year 1847, under the title of "The Association of Government Railway Directions," which now embraced the whole of the lines with very unimportant exceptions.—Each company subscribed a fixed sum toward

the general management fund, together with a variable amount, depending upon its length, and was represented at the meetings of the association, and in the debates, in proportion to its importance. A code of laws had been drawn up and agreed to, which was revised from time to time; the rules expressing the decided opinion of the associated body upon all points usually involved in the construction and working of railways. *The gauge was now universally throughout the country four feet eight and a half inches.* With regard to curves and gradients, the rules laid down were,—First, the radius of curvature should, if possible, not be less than 3,600 feet in level land, nor than 2,00 feet in hilly districts, except in particular instances where it might be necessary to reduce it to 1,200 feet, or even in very rare cases, to 600 feet, but never less. Second, the general scale of maximum gradients admissible on railways was 1 in two hundred in level districts, one in one hundred among hills, and one in forty on mountain lines. Several examples of short curves upon works already executed were then noticed. The increased power of locomotive engines had led to a severer character of ruling gradients being introduced than was formerly contemplated, and there were ample proofs, in every part of the country, that the limits, recognized at present as suitable for the working of locomotives, had been reached. Many instances were then given of steep gradients and sharp curves, including a particular account of the Semmering railway, and of the mode of working it. As, however, a description of this railway had been brought before the Institution by Mr. C. R. Drysdale, in the year 1856 (*Minutes of Proceedings Inst. C. E., Vol. XV., p. 349*), it would suffice to say, that the experience derived from the working of the line went to show, that one of the good engines was capable of drawing up the inclines of 1 in 40, at the rate of $9\frac{1}{2}$ miles per hour, a train, whose gross weight varied from 100 to 165 tons, according to the state of the rails and of the weather at the time. The ordinary rate of speed was fixed at:

	Ascending.	Descending.
	Miles per Hour.	Miles per Hour.
For express trains.....	14-17	16½
" ordinary passenger.....	11½	14-17
" goods, including military transport.....	9½	9½

The maximum number of trains which had passed over the line in one day was seventy-two, counting both ways. This was during the Italian war. The ordinary number was twenty-seven, with from seven to eight carriages each. The line was about $23\frac{1}{2}$ miles in length, was laid with a double way throughout, and had cost £98,270 per mile.

It appeared to be a general, although not a universal, plan, in the case of all main lines, to prepare the earthworks and masonry for a double way throughout, but not to lay the second line of rails until the success of the undertaking and the requirements of the traffic demand it. Some of the heaviest earthworks executed up to the present day were then alluded to, including one on the Southern State Railway of Bavaria, the greatest height of which was 172 feet, and which contained nearly 3,000,000 cubic yards of material. A list of the largest tunnels on the principal lines was then given.

Viaducts and bridges were treated under two headings: First, bridges composed altogether of masonry; and, second, iron bridges. The views of the Associated Railway Directors on bridge building were: 1st. For bridges, arches of stone or good bricks were preferable to every other description of structure, except in cases which required very oblique

bridges. 2d. Timber bridges were inadmissible. 3d. When iron bridges were made use of, the portion of the structure which sustained the roadway should consist of either rolled or wrought iron. Thus cast-iron bridges, as well as timber ones, were removed from the field of investigation; the former by negation and the latter by direct condemnation.

Instances were then adduced, and details given, of several examples of stone viaducts and bridges, of imposing dimensions and extent, including those over the Goelzsch and the Elser Valleys, on the railway from Leipzig to Hof, and the Neisse Viaduct on the railway from Kohlfurth to Goerlitz, in Prussia. The result of a series of experiments, for the purpose of ascertaining the best description of concrete to be placed round the foundations of river piers in the latter case, gave proportions most suitable for yielding a quick setting—hard concrete at 22 per cent of cement, 22 of sand, and 56 of small broken stones, not exceeding 2 inches in diameter. In regard to the bridge over the river Neckar, on the railway from Frankfort-on-Maine to Heidelberg, it was stated that the depth of the keystone was somewhat over the minimum required both by Desjardin's formula and by that of Gauthey; but, on the other hand, it was so out of proportion with the huge thickness obtained from the method of Perronet, as to prove the total unfitness of this system for calculating cases similar to the one in question. Thus,

	Metres.
The Neckar Bridge had a depth of key of.....	1.200
" Gauthey's formula required.....	1.125
" Desjardin's " ".....	1.140
" Perronet " ".....	3.241

In the case of wrought-iron bridges, the arrangement most usually adopted, when the spans were wide, was that of a lattice construction, in some one of its various modifications. One of the earliest examples, which was described in detail, was the bridge over the river Kinzig, at Offenbourg, on the Baden State railway, in which it was considered that the arrangement of the material was not judicious, as,—first, the dimensions of the iron-work were uniform throughout the length of the span, second, although a stronger lattice construction was adopted in the case of the central girder, still the top and bottom sections were of similar dimensions to the outside ones; and, third, the cross sectional area of the iron had not been properly proportioned to its different powers to resist compression and extension where those forces acted. The bridge over the river vistula, at Dirschau, on the Eastern Railway of Prussia, was next referred to. It consisted of six spans, each 397 feet 6 inches in the clear, the depth of the girders being 38 feet 9 inches, and the whole of the material in the superstructure being carefully proportioned to the nature of the strains to which it would be exposed. The Marienberg bridge, over the river Nogat, on the same railway, was likewise minutely described. The next examples selected were those over the Rhine, at Cologne, and at Kehl, close to Strasburg; in the latter case, the method adopted in constructing the foundations, by means of compressed air, was also mentioned. It was stated that the operation of sinking the foundations progressed at the rate of about twenty inches per day of twenty-four hours.

In addition, there was also another bridge over the Rhine, at Mayence, which consisted of thirty-two openings, having together a clear waterway of 3,134 feet 6 inches lineal measure. The ironwork in the superstructure was somewhat similarly arranged to that of the Saltash bridge, modified, in some particulars, as to the cross section, and the form in which

the material was applied, according to what is known in Germany as the system of Professor Pauli, of Munich, which gave a rectangular top to the beam instead of an oval one.

Attention was directed to the permanent way. It appeared that about seven-eighths of the rails in use were of the broad base, or contractor's pattern: the remaining one-eighth being composed chiefly of chair-rails, with a small proportion of bridge-shaped ones. As to size, the rails were not less than $4\frac{1}{2}$ inches in height, by $2\frac{1}{2}$ inches width of head, and the surface was curved to a radius of from 5 to 7 inches. They weighed, generally, from 66 to 76 lbs. per yard. Fish-plates were now almost universally adopted for connecting the ends of the rails, and the joints were always supported by a sleeper—a wrought-iron chair being interposed between the rail and the timber. Recently a trial had been made of the modern English system of leaving the joint free, without any sleeper under it, and the result had been so satisfactory, that it was intended to extend it. The almost universal system of supports was that of cross sleepers. They were of oak, where it could be procured at a reasonable price; but different descriptions of larch and fir were often used, after being prepared by some chemical process, to resist the tendency to decay.

The quantity and description of rolling stock in use on different railways in Northern and Southern Germany varied greatly; but, as nearly as could be estimated, at the close of the year 1861, there were:

Locomotive engines.....	0.414 per Eng. mile
Pass'r. cars, average 41 8 seats each.....	0.807
Good trucks, average load 6.9 tons.....	7.040

Before any engine was permitted to be used, its boiler must be tested with hydraulic pressure, to at least one and a half times the maximum steam pressure which it was intended to sustain, and a similar test must be applied after the engine had run its first 46,109 miles, and be subsequently repeated every time an additional 36,887 miles had been made. The rate of speed was usually, for express trains, from 27 to 35 miles an hour; for ordinary passenger trains, from 50 to 25 miles; and goods trains, from 10 to 15 miles per hour—in each exclusive of stoppages.—*Newton's London Journal of Arts for December.*

A NATIONAL CANAL PROPOSED.

ILLINOIS CENTRAL RAILROAD COMPANY }
PRESIDENT'S OFFICE, CHICAGO, DEC. 8, 1862. }
William H. Van Pelt, Esq., President State Agricultural Society, Dixon, Ill.:

DEAR SIR:—It seems to me desirable at this time that some organized and responsible body of gentlemen, directly representing the land interest of this State, should meet for the purpose of consultation to determine the most practicable method of improving the facilities for carrying to market the vast products of this and the neighboring States west of Lake Michigan. The cultivation of the most fertile land in the world is almost rendered unprofitable through the unnecessary expense of handling our crops to tide-water. We are confined to a narrow water-course. The Erie Canal sufficed when the Northwest sent 50,000,000 bushels of grain, but is utterly inadequate to taking off our present surplus of upwards of 150,000,000 bushels.

It is almost idle to extend the internal improvements of the Northwest, or to urge the farmers to produce more, while every acre cultivated adds to the volume of business which already chokes the narrow channels of

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	R to of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	48	3	3	3	3	3	3	3						
Baltimore and Ohio.....	Md.	64	380	13,111,800	10,781,833	506,071	3,922,203	2,303,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do										"	2,500,000	6	95	1885	
do do										"	700,000	6	84	1820	
do do										"	1,125,500	6	90	1875	
do Washington Branch.....	Md.	30	1,650,000							"	1,000,000	6		1867	
do do	Ohio & Ind.	118	1,859,813	1,256,750		139,120	314,090	8,793	Dec. 1860.	1st Mortgage.....	1,000,000	7	55	1866	
do do										2d	160,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	60	68	1,950,950	1,049,000	27,345	911,019	492,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	138	75	1,101,432	1,428,000		104,800	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	96	3,984,400				1,997,063	733,950	Dec. 31, 1860.	1st Mortgage.....	450,000				
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,350	Aug. 1, 1859	1st Mortgage.....	800,000		62	1864	
do do										1st	50,000		64	1865	
do do										2d	950,000			1875	
do do										3d	1,367,800			1876	
do do										4th	1,400,000			1865 & 1870	
Central of New Jersey.....	N. J.	64	2,200,000	3,186,000		175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	600,000		7	1875	
do do										2d	2,000,000				
Chicago, Alton and St. Louis.....	Ills.	85	222	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	1,515,000		10		
do do										2d	1,000,000				
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	200,000				
do do															
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	194	2,297,756	7,335,493		50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000		7	101	Feb & Aug 1
do do										2d	3,600,000		6	31	Feb. & Aug. 1
do do										2d	2,400,000		2	103	May 1.
Chicago and Rock Island.....	Ills.	81	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000		2	103	1870
Chicago, Burlington and Quincy.....	"	94	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000		8	118	1890
do do										" 2d " S. F.	813,000				1867
do do										1st Mor. Chi. & Aur.	394,000				1869
do do										2d " "	303,190				1864
do do										1st " Cent. Mil. Tract	394,000				1868
do do										2d " "	245,000				
Chicago, Iowa and Nebraska.....	Ind.	82	No report												
Cincinnati and Chicago Air Line.....	Ohio.	105	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000		7	100	1867
do do										2d	950,000				1860
Cincinnati, Hamilton and Dayton.....	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,500,000				
do do										2d	532,400				
do do										3d	104,000				
Cleveland and Mahoning.....	Ohio.	68		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,599			80	
do do										1st Mortgage.....	850,000				
do do										2d	409,000				
do do										3d	341,100				
Cleveland and Pittsburgh.....	Ohio & Pa.	57	196	In hands of Receiver.	4,918,325	653,891				1st Mortgage M. L.	800,000			100	1860
do do										2d " M. L. or 1st Ex.	1,188,000			96	1873
do do										3d 2d Ex.	1,165,000			81	1865
do do										4th 3d Ex.	1,154,000			73	
Cleveland and Toledo.....	Ohio.	78	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	359,000			103	1867
do do										1st " 2d Div.	263,000				1872
do do										2d " "	263,000				1862
do do										1st " Tol. Nor. & Clev	521,000				1863
do do										2d " "	293,300				1864
do do										Junction Income..	44,500				1864
do do										C. & T. Income..	300,000				1864 & 1890
Cleveland, Columbus and Cincinnati.	Ohio.	145	135	4,746,100	519,000	4,201	1,255,003	644,888	Dec. 31, 1861.	1st Mortgage.....	519,000				
Cleveland, Painesville and Ashtabula..	"	145	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000			106	1861
do do										2d	303,000				1862
Columbus and Xenia.....	Ohio.	115	54	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700			100	1860 to 1866
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000				
Dayton and Michigan.....	"	142		2,176,666	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	2d	2,212,000				
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000			50	1875
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000			90	1875
do do										2d	1,000,900				1866
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		96,061	1,219,100	249,668	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.											
Galena and Chicago Union.....	Ills.	82	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	400,000				
do do										2d	180,000				
Great Western.....	Ills.	175		1,600,000	2,391,000		425,943	181,529	May 31, 1861.	1st Mortgage.....	1,992,000			104	1862 & 1863
do do										2d	1,520,000				May 1, 1875
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report	75,000	63,141	13,573		1st Mortgage W. D.	1,041,000			10	
Greenville and Miami.....	Mo.	32		300,000	473,000					1st " E. D.	1,350,000			7	
Hannibal and St. Joseph.....	Mo.	206		1,041,066	10,354,000	220,346	996,907	512,933	Sept. 1, 1860.	Land Mortgage...	5,000,000				
do do										Mortgage Conv.....	1,354,000			6	4
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	927,000			6	30
Hudson River.....	N. Y.	144		3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000			7	18
do do										2d S. F.	2,000,000			7	114
do do										3d	1,840,000			7	101
Illinois Central.....	Ills.	83	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000			7	09
do do										Construction.....	12,885,400			7	100
do do										"	4,115,000			6	97
do do										Debentures.....	42,740				96
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	60,000				
do do										2d	578,000			10	
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		Income.....	38,700				
do do										1st Mortgage.....	500,000				
do do										2d	400,000				
Indianapolis, Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort...	200,000				90
do do										1st Mortgage.....	649,984				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report	No report		2d	314,000				
do do	Ohio.	13		118,865	50,000		No report	No report							

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation on Stocks	Lot of Ry.	Capital paid in.	Total Fund- ed D. It.	Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount	Rate of Int.	Quotation on Bonds.	Due.
Iron Mountain.....	Mo.	80 1/2		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jellersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st ".....	280,000	7	75	1861
do										2d ".....	392,000	7	70	1873
Kentucky Central (Coving on nd Lexington).....	Ky.		99	Sold out under mortgage	2,930,000	337,632	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st ".....	260,000	7		
do										2d " Conv.....	1,000,000	7		
do										3d ".....	600,000	7		
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiv. er.						1st Mortgage E. D.	904,000		89	
do										2d " E. D.	1,000,000			
do										1st Land Grant W D	4,000,000		21	
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report			1st Mortgage.....	130,000	6		
Lexington and Frankfort.....	Ky.		29	514,433	130,000		107,944	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		
Little Miami.....	Ohio.	115	63				1,330,050	529,981	Jan. 1, 1862	City Loan.....	174,000	6		1883
Louisville and Frankfort.....	Ky.		63	1,169,59	384,519		245,910	93,679	June 30, 1861	1st Mortgage.....	248,000	7		
do										1st Mortgage.....	2,000,000	7		
Louisville and Nashville.....	Ky.		268	5,031,469	3,360,500	348,070	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000			
do										1st " Memphis Br.	500,000			
Louisville, New Albany and Chicago..	Ind.		268	2,900,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.		87	1,648,050	1,235,300	87,969	230,503	99,090	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861
Marietta and Cincinnati.....	Ohio.		208	8,561,213	190,468	108,150	430,649	78,200	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868
do										2d ".....	2,000,000	7		
do										3d ".....	1,500,000	7		
do										Sterling Income.....	333,000	4		
do										Domestic.....	928,617			
Michigan Central.....	Mich.		91	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	1st Mortg' Sterling	467,483	6	98 1/2	1872
do										1st " Gov.....	500,000	8	84	1869
do										1st " unconv.....	250,000	8	96	1860
do										1st " Dollar Conv.....	2,500,000	8	106	1869
do										1st " S. F. Conv.....	4,153,000	8	118	1862
Michigan South'n & North'n Indiana	Mich &		46	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. S.....	991,000	10	108	1860
do										" Nor. Ind.....	985,000	10	103	1861
do										" Goshen Line.....	1,168,600	10	100	1868
do										S. F. Toledo.....	2,550,000	10 3/4	103 1/2	1865
do										2d Mortgage.....	2,465,000	9 3/4	93 1/2	1877
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d ".....	201,000	8		
Milwaukee and Horicon.....	Wis.		42	1,101,200						1st Mortgage.....	420,000	8		
do										2d ".....	600,000	8		
Milwaukee and Prairie du Chien.....	Wis.		38	4,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	104	1891
Milwaukee and Western.....	Wis.		71	No report										
Mississippi and Missouri.....	Iowa,		35	No report						1st Mortgage Conv.....	1,000,000	7	96	
do										2d " S. F.....	400,000	8		
do										Oskaloosa Div.....	1,425,000	7		
do										Land Grant.....	7,000,000	7		
New Jersey.....	N. J.		34	4,307,800	698,000		992,767	570,081	Dec. 31, 1861.	Mortgage.....	711,000		109	
New Jersey Central.....	N. J.	155	64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860					
New York and Erie Pref.....	N. Y.	66		Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860	1st Mortgage.....	3,000,000		106	
do										2d ".....	4,000,000		111	
do										3d ".....	6,000,000		167	
do										4th ".....	4,900,000		100	
do										5th ".....	1,792,500		00	
New York and Harlem Pref.....	Conn.		50				1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	109 1/2	1873
do										2d ".....	1,000,000	7	94	1864
New York and New Haven.....	Conn.		21	3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	6		Dec. 1, 1860
do														Oct. 1, 1875
New York Central.....	N. Y.	103 1/2	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.	7,925,000	6	106 1/2	May 1, 1882
do										Mortgage.....	3,000,000	7	15	June 15, 1864
Norfolk Central.....	Md.		138	2,600,000	5,890,300	537,996	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,000,000	6		1885
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,500,000	6		
Ohio and Mississippi, Eastern Div....	Ohio & Ind		192	Leased.	9,680,000	2,330,030	898,217	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6		
do										3d ".....	316,905			
do										Construction.....	4,637,320			
do										Income.....	3,591,185			
Ohio and Mississippi, Western Div....	Ills.		148		3,292,403		No report			State Loan.....	7,000,000			
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W.....	2,800,000	6		
do										Construction.....	4,500,000	6		
Pennsylvania.....	Pa.		359	13,261,900	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.....	4,900,000	6	104 1/2	1888
do										2d ".....	2,319,000	6	98 1/2	1875
do										3d " Sterling.....	1,937,440	6		1875
do										State Works.....	7,200,000	5	89	
Peru and Indianapolis.....	Ind.		74	1,100,000	820,000	80,000	No report							
Philadelphia, Wil. and Baltimore.....	Del.		98	5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6	99 1/2	1884
do										Improvement.....	119,000	6		1863
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	60	467	Sold for Floating Debt.	10,192,135	1,757,273	2,335,353	761,555	June 30, 1861	1st Mort. O. & P.....	1,000,000	7	109	1865
do										2d ".....	750,000	7	93	1866
do										1st " O. & I.....	1,000,000	7		1872
do										2d ".....	380,000	7		1873
Pittsburgh and Connellsville.....	Pa.		49	1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000			
Racine and Mississippi.....	Wis.		104	2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.					
Sandusky, Dayton and Cincinnati..	Ohio.		170	2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856
do										".....	997,000	7		1866
do										".....	1,000,000	7		1875
Sandusky, Mansfield and Newark....	Ohio.		125	848,770	1,285,000	132,003	135,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886
do														
Springfield, Mt. Vernon & Pittsburgh.	Ohio.		50	1,000,000	1,050,000	200,000	110,200	53,100		1st Mortgage.....	500,000			
do										2d ".....	450,000			
Steuensville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870
do										2d ".....	900,000	7		1865
Terre Haute, Alton and St. Louis....	Ills.		30	No report						1st Mortgage Conv.....	1,000,000	7	102	1862
do										2d " Conv.....	2,000,000	7	78	1868 & 1870
do										1st " Bel. & Ill.	517,000	7		1873
Terre Haute and Richmond.....	Ind.		105	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	106	1866
Toledo, Wabash and Western.....	Ohio & Ind		40	2,123,506	5,096,049	52,389	233,546			1st Mortgage.....	2,400,000	7	92 1/2	Aug. 1, 1865
do			80							2d ".....	2,500,000	7	81 1/2	Nov. 1, 1878
do										Mort. Coupons.....	98,040	7		1860 to 1865

the Erie Canal and three trunk lines of rail way. A broad water course from Lake Erie to the Hudson, through which our lake vessels can float without breaking bulk, will cheapen the cost of transportation to the point at which we can supply the European markets profitably under all circumstances.

A leading commercial house in London writes: "Of the present population of Europe, which is two hundred and eighty millions, about one hundred and fifty millions are consumers of wheat, using annually upwards of one hundred millions of quarters, or one thousand millions of bushels. This mass of people may be considered to press always upon the means of subsistence or supply of food, since there is no instance within the memory of man of any large accumulation of wheat for want of buyers or consumers; it is only by a succession of two or three abundant harvests that prices can be brought in Europe to a low level, say 36s per quarter in England, and 30s on the Continent. Such was the case once in this century—in 1835. Overwhelming importations from your country would operate in the same way as a succession of abundant crops in Europe. These would, in course of time, depress prices to the minimum of 30s in England, and 30s in Europe—the average price of wheat in England for twenty-two years has been 54s 6d per quarter.) Such a state would presuppose that America could furnish an annually increasing immense supply at the cost of 3s 4d, or 83c per bushel on board at the shipping ports, and probably no less a quantity than five hundred millions of bushels would have that effect." This reliable and carefully revised statement seems conclusive in regard to the markets. There is an almost unlimited demand for our products—wheat, Indian corn, barley and provisions.

The question of transportation is vital to the interests of our agricultural State. Illinois has for two years sent away food enough to supply ten millions of people, and November of each of the last two years has closed down on a surplus of food in this State as large as that sent off in the shipping season. At this moment, only a fortnight after the close of navigation, all the lines of railways east from Chicago are blocked with beef, flour, pork, and every description of provisions. It may be said that this is exceptional in consequence of the loss of the southern trade, but it is hardly the case. Iowa and Missouri suffer more from the loss of the trade with the South, for the grain of those States cannot afford the railway transportation from thence to the lakes. Their crops are largely in the hands of the producer, waiting for the opening of the Mississippi.

Nine-tenths of the products of Illinois grown near the lines of railways constructed within the last fifteen years, and upon which over three-fourths of the population of the State reside, have hitherto been forwarded to eastern markets. If the southern trade was resumed at once, it would, doubtless, be found at the close of navigation next year, that as large a supply of food will be left in the country, solely from the want of means during the periods of open navigation of the lakes and canal to take forward the surplus.

Every experienced farmer will confirm the statement that it requires four or five years before new settlers, even upon our easily managed prairie soils, can furnish a large surplus for market, and, I think, will agree that the effect of the extraordinary emigration to this State, between 1852 and 1856, was not apparent in the surplus products until the harvest of 1860. We have now been blessed with

abundant harvests, and have overtaxed all the resources of the avenues of transit to tide water to such an extent that our own competition to sell has destroyed our profits. The charge by water upon a bushel of corn to New York, for instance, has, for two seasons past, been four times as great as the cost of producing it. We must regard this, not only as essential to our own maintenance and prosperity, but as one of the highest national importances.

The food-producing district should have closer connection with the commercial interests of the East and of Europe, by a National Canal. Every fibre of the national wealth and prosperity will be strengthened thereby. The harvests from our prairies will double our foreign exports, when this grain is poured out as rapidly as it can be furnished even by our present population.

Within five years after the construction of a ship canal from the Erie to the Hudson, a necessary outlet from the lakes to the sea, the exports of grain from Chicago alone may be safely estimated at 200,000,000 bushels.

For two or three years past we have had a surplus equal to ten times our local wants, and vastly beyond the capacity of the canals and railroads to take away. The cost and delays of transportation are so great that the farmers in this State reap no fitting reward for their industry. Their crops are wasted, and, living in this abundance which is wanted everywhere else, they are poor and need the comforts and luxuries of life. Single banded they cannot remedy this evil. For aid they must look to the national resources. The work is of national importance, and must add immensely to the national wealth.

I would respectfully suggest that your State Agricultural Society should consider this matter; if in your judgement it is wise to do so, should memorialize Congress; and if deemed expedient, suggest to your Legislature the propriety of instructing your Representatives and Senators to urge upon the national council the importance of the enlargement of the Erie Canal—a subject which is now under consideration in Congress.

I am your obedient servant,

W. H. OSBORN.

JOHN OWEN STERNS.

Late Superintendent of the Central Railroad of New Jersey.

BY ONSLOW STERNS.

John Owen Sterns, son of John Sterns, was born in Billerica, near Boston, Mass., on the 3d of August, 1805, being one of a family of four sons and two daughters. He received such education as is usually acquired at district schools, working a portion of the time on his father's farm, which had descended from his earliest ancestors through his grandfather, the Hon. Isaac Sterns. From his sixteenth to his twentieth year, he was occupied in mechanical pursuits; after which he was engaged in a subordinate capacity in the construction of the Blackstone Canal in Rhode Island, and Fort Trumbull, Connecticut. A few years later he was employed, by contract, in building locks on the Chesapeake and Ohio Canal, and then in constructing the macadamized turnpike road from Harper's Ferry up the valley of the Shenandoah to Smithfield.

In 1832, he commenced his career as a railroad contractor by taking several sections on the Philadelphia and Columbia Railroad; and from that time he was continually engaged in the construction of roads in different

parts of the country, until his permanent connection with the (now) Central Railroad of New Jersey. The following is a list of these works, as nearly as possible, in the order of time:

Philadelphia and Columbia Railroad, Pa.; Germantown Railroad, Pa.; Philadelphia and Trenton Railroad, Pa.; Delaware and Atlantic (or Jobstown) Railroad, N. J.; Camden & Amboy Railroad, N. J.; Philadelphia and Norristown Railroad, Pa.; Elizabethtown and Somerville Railroad, N. J.; Willow Street Railroad, Philadelphia, Pa.; Southwark Railroad, Philadelphia, Pa.; Brooklyn and Jamaica Railroad, L. I.; Philadelphia, Wilmington and Baltimore Railroad; Andover and Haverhill Railroad, Mass.; Charlestown Branch Railroad, Mass.; Chester Valley Railroad, Pa.; Market Street Railroad, Philadelphia, Pa.; Blossburg and Corning Railroad, N. Y.; Tioga Railroad, Pa.; West Philadelphia Railroad, Pa.; and Baltimore and Ohio Railroad.

His most extensive labors were upon the Central Railroad of New Jersey, to which his railroad services have been almost exclusively devoted since 1842. The original road, extending from Elizabethport to Somerville, was built by contract by him and his partner, Coffin Colkett, at different periods between the years 1834 and 1842. Afterward the road was leased to and run by them. Still later, when the embarrassments of the company led to a foreclosure, the road was bought in by Colkett and Sterns, in 1846, and a new company organized, of which Mr. Sterns was elected Superintendent, being also a member of the Board of Directors. When the Somerville and Easton Railroad Company was organized to extend the road to the Delaware, he was active in the new organization, a member of the Board, and efficient in urging its construction. When the old and new companies were united, in 1849, as the Central Railroad of New Jersey, he retained his seat in the Board and the Superintendency of the whole road, to which the title of Engineer was subsequently added. At the time of his death, the company were about to raise him to the post of Vice-President.

His operations in iron, lumber and mining in New York and Pennsylvania during the last twenty years have been somewhat large. About the year 1842, he purchased the property of the Lycoming Coal and Iron Company, situated at Farrandville, Lycoming Co., Pa., consisting of coal and iron mines, a large rolling-mill, iron foundry, lumber-mills, timber lands with improvements, etc., which had cost a company of capitalists from Boston nearly half a million of dollars. This property he bought at a greatly reduced price. After operating the coal and iron mines, the mill and foundry, and the lumber mills for several years, he disposed of the mines and iron works, retaining only the timber lands and lumber mills. Adding largely to the former, and erecting additional mills, he continued to operate them advantageously till the time of his decease.

It is hardly necessary to mention the operations which he projected to develop the resources of New Jersey in the iron mines, but to these he devoted much time and thought, and was at considerable expense.

By his active life and business sagacity he accumulated a handsome property. He was married on the 5th of April, 1842, to Margaret C. Walker, daughter of William Walker. He died suddenly at his residence in Elizabeth New Jersey, on the 1st of November, 1862, of disease of the heart, to which he had been subject for about two years. His wife and seven children survive him.

A gentleman, who has had business connections with Mr. Sterns for many years, remarks, in speaking of his integrity as a man: "Mr. Sterns was eminently a just man in all his dealings. The position he occupied for the past fifteen years of his life afforded abundant opportunities for enriching himself in various ways, which some men think not inconsistent with strict integrity. He always stood above suspicion, and I am authorized to say on the part of those he so faithfully served that they never had occasion to suspect his integrity. Truthful and free from suspicion; never seeming to be what he was not; never violating his own sense of right for the sake of gain, he has been eminently successful in his business, and the hundreds of men over whom he has been placed trusted, honored, and loved him."

The company have caused to be erected over his grave in Evergreen Cemetery, Elizabeth, a suitable monument as a "memorial of his long, faithful, and valuable services."

Resolutions Passed by the Directors of the Central Railroad Company of New Jersey.

At a regular meeting of the Board of Directors of the Central Railroad Company of New Jersey, held Nov., 10th, 1862, the following action was had:

The President announced the sudden death, on the 1st inst., of John O. Sterns, a member of the Board, and the Superintendent of this company. Whereupon a committee, consisting of Messrs. Williamson, Frelinghuysen and Dodge, were appointed to draft resolutions expressing the feelings of the Directors on the occurrence, and made the following report, which was adopted:

Resolved, That this Board has heard with sorrow the death of John O. Sterns. As a Director, he was ever faithful to the trust reposed in him by the Stockholders; and as Superintendent, to his industry, ability and honesty in the discharge of the arduous and responsible duties which belong to the position, is the success of this company in a large measure to be attributed.

It is due to his memory that the Directors shall record upon their minutes not only their estimation of his services to the company, but their testimony also to the virtues of his social and private character. He was benevolent in his disposition, unassuming in his manners, sincere and warm-hearted in his intercourse with others, true and just in all his dealings; and during the sixteen years he was Superintendent of this company, not a single instance occurred to give rise to the suspicion of his disregard of the most scrupulous integrity.

He enjoyed, as he well merited, our unbounded confidence. The remembrance of our intercourse with him as Directors and of his integrity of character is pleasant to us, as we officially pay this last tribute of respect to his memory.

Resolved, That the Treasurer be directed to pay the funeral expenses of the deceased.

Resolved, That this company will have a suitable monument erected over his grave in the Evergreen Cemetery, at Elizabeth, New Jersey, and that the President be requested to see that the object of this resolution be carried out.

Resolved, That these proceedings be entered on the minutes, and that the President enclose a copy to the family of the deceased and express to them our sympathy in their affliction.

MONETARY & COMMERCIAL.

The first week of the New Year has opened as the first week of the years only opens. There is a general lull in business and a general settling up of old accounts. So far, we believe, balances have been adjusted as promptly, and perhaps more so than in previous years. 1862 may be set down as a year of prosperity in nearly every branch of trade. Its predecessor was marked by great changes, which were in many instances accompanied by hardships. The arts of peace were in a great measure laid aside; and those branches of trade which owe their prosperity to a peaceful state of things as a consequence declined. The arts of war flourished, and every thing tending to the supply of an army was in demand. One class of manufacturers failed and another sprung up. In making the changes many suffered, but when once made, there is as great a demand for labor and it is as well paid as it ever was. Another change of great importance was introduced last year. The credit system was mainly broken up and a cash basis established. To do business now requires capital, and consequently, what is transacted, is done more safely and satisfactorily than it ever was before. This latter, especially, is a great change for the better. The many hands that have been withdrawn from the plough and the workshop to carry the musket have made a scarcity in the ranks of labor, and consequently labor has appreciated.

The demand for money is light as compared with former years. Indeed, so strictly have the lines been drawn, that but little paper that could be offered would be passed as first class, and none but the very first class has heretofore been accepted. Currency, during the past week, for some cause, has been in light supply. Rates rule at 10@12 ¢ cent for first class names. Coin is held firmly with an advancing tendency. Exchange is dull. Rates are as follows:

	Buying.	Selling.
New York.....	1/2 @ 1/2 dis.	par
Philadelphia.....	1/2 @ 1/2 dis.	par
Boston.....	1/2 @ 1/2 dis.	par
Baltimore.....	1/2 @ 1/2 dis.	par
Gold.....	32 @ 33 prem.	35 @ 36 prem.
Silver.....	23 @ 24 prem.	
Demand Notes.....	26 @ 27 prem.	

Quartermaster's checks have been received with more favor than for the previous two weeks. They have been purchased at 3 1/2 @ 3 3/4 discount. We have heard of transactions as low as 3 1/4. The victory at Murfreesboro' is reducing the defeat at Fredericksburg. A new phase has been developed in French policy. It is now asserted that the Emperor believes that the South, having vainly essayed for two years to establish an independence, should lay down their arms and treat for peace. This is a very sensible view of the subject, but the difficulty is to persuade the South to think so. Whether the Emperor will succeed in doing this or not, it is quite evident he has

no immediate design of assisting them to carry on the war.

General business is dull. The pork business, however, has been very active, although the weather has been almost too warm to make packing entirely safe. Prices, however, have been well sustained. The lowest of the week were \$4 00 @ 4 10, and the highest \$4 80 @ 4 90. The average being \$4 40 @ 4 45.

The *Price Current* foots up the receipts during the week, the season and comparatively for some previous seasons as follows:

By railways.....	37,212
By river.....	690
From Kentucky.....	227
Driven in.....	1,640
Slaughtered at Plainville and Newtown.....	1,100
Total for the week.....	40,869
Previously reported.....	479,698
Total for the season.....	520,567
Total up to Jan. 7, 1862.....	361,295
" " 1851.....	358,001
" " 1860.....	427,702
" " 1859.....	353,282
" " 1858.....	348,432
" " 1857.....	338,252
" " 1856.....	366,893
" " 1855.....	327,433
" " 1854.....	302,791
" " 1853.....	355,121

The hogs received have been heavy. Mess pork, old, is quoted at \$10 75 @ 11 00 for country; and \$11 00 @ 11 25 for city brands. New mess, \$13 00. Lard is quoted at 8 1/2 @ 8 3/4.

Long and short rib middles are quoted at 6 1/2 ¢. Short clear middles, 6 1/2 ¢. Dry salted hams, 5 1/2 ¢. Dry salted shoulders, 3 1/2 ¢.

Wheat is firm. Choice red is quoted at \$1 02 @ 1 03. White is nominal at \$1 10 @ 1 12. Flour is in good demand at 5 25 to 5 20 for good superfine, 5 25 @ 5 30 for extra, 5 40 @ 5 50 for family, and 5 60 @ 5 75 for fancy.

THE CHICAGO & ROCK ISLAND R. R.—The bed of the Rock Island and Chicago Railroad has been much improved during the past year by the removal of all defective ties and the substitution of sound ones, and by the supply of a new kind of chair which is such an improvement upon the ones previously in use that one might almost imagine himself to be riding on the continuous rail. It is one of the smoothest running roads in the West.—*R. R. Gazette.*

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

Through Distance 280 Miles;

42 Miles Shorter than any other Route

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C., H. and D. Depot, at 8:00 A. M., 7:00 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, southeast corner of Front and Broadway, corner Vine and 3d, under Burnet House and at Sixth street Depot.

Freight trains leave at 6:00 P. M. and run direct through to Chicago without re-loading or transshipment.

JOHN BRANT, JR., Superintendent.

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

Gen. Freight Agent,

33 Randolph Street, under Serman House, Chicago, Ills.

CAST STEEL WORKS.

OF
FRIED. KRUPP,

At ESSEN in Rhenish Prussia.

Patent Railway Tires, without a weld. Axles, Cannon, Anchor Flukes, Propeller Blades and Shafts. Cranked Axles and Shafts, up to Twenty Tons weight.

CAST STEEL IN BARS, BEST QUALITY,

Suitable for Axles, Shafts, Rolls, Tools, Dies, Needle and Music Wire, Fine Cutlery, &c,

KRUPP'S TIRES

Are cheaper at their cost than Iron ones gratis.

They will, without turning, entirely outwear the best Iron ones.

Wear uniformly, without flat places, or lamination.

Are not affected by extreme cold.

More than forty Thousand of these Tires have been supplied.

KRUPP'S AXLES

Possess similar advantages over iron ones that the Tires do.

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SOLE REPRESENTATIVES IN AMERICA.

HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

Carriage, Tire, Machine, Plow, & all kinds of

SCREW BOLTS,

Nos. 535 & 537 Central Avenue,
CINCINNATI.

BRIDGE BOLTS, Rivets of all sizes, Coach Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27, 1y

Philadelphia, Wilm'gton & Baltimore

RAILROAD!



FOUR PASSENGER TRAINS DAILY!

RAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11. P. M., Express.

On Sundays at 9.30, A. M., and 11. P. M.

Leave Baltimore for the North and West daily, at 8.30; A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail, and 7.00 P. M., Express.

On Sundays at 7. P. M., only.

Through connections made for all points at the North, East and West.

WM. CRAWFORD, Agent.

KNOX & SHAIN,

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INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

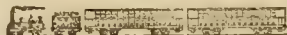
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CHICAGO, GREAT WESTERN AND
NORTH-WESTERN LINE—INDIANA
POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS.

CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—5:00 A. M.—Chicago Mail for Indianapolis. Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—12:45 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis. Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M. Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—5:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North-western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address at either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent.]

C. R. COTTON, Cincinnati

J. T. CRAPSET,
ATTORNEY AT LAW,

—OFFICE—

N. W. Cor. Walnut & Sixth Street,
CINCINNATI

KNIGHT BROS. Consulting Engineers,

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COUNSELLORS
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CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and takes collections.

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Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,

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MANUFACTURE

CHILLED WHEELS

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TYRES,

FOR RAILROAD CARS

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LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

CELEBRATED WHEELS.

Either Single or Double Plate,
With or without Axles.

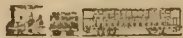
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In the best Manner, at the Shortest Notice,

Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition

The well-earned reputation of this Road for
SPEED, SECURITY AND COMFORT
Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY

W. P. SMITH, Master Transportation, Baltimore.
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ERIE RAILWAY.

Great Broad Gauge, Double Track
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NEW YORK, BOSTON,

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Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6. CHARLES MINOT, Gen'l Sup't

J. W. MORRILL. G. B. BOWERS

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(Successors to and members of the late firm of
C. WASON & CO.)

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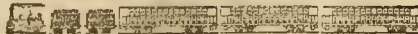
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Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men the West that all work furnished by us shall be of the best. Its style, workmanship and material. Orders are respectfully solicited, with the assurance that we will be spared to give entire satisfaction.

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(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH to PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
ONE TRAIN RUNS DAILY (430 MILES.)
VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

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By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "PA. PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
D. A. STEWART, Freight Agent, Pittsburgh.
CLARKE & CO., Transfer Agents, Pittsburgh.
R. C. MELDRUM & CO., Madison, Indiana.
J. E. MOORE, Louisville, Ky.
W. W. AIKMAN & CO., Evansville, Ind.
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R. C. MELDRUM, General Traveling Agent for the South and West.

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Driver and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

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General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	9:30 P. M.
Mail and Express.....	8:30 A. M.	6:30 P. M.
Columbus Accommodation.....	4:00 P. M.	11:05 A. M.
Morrow Accommodation.....	6:00 P. M.	8:05 A. M.

Cincinnati Hamilton and Dayton. RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	7:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	7:00 A. M.	11:40 P. M.
Cin. & Chicago Air-Line Ex.....	8:00 A. M.	8:50 P. M.
Dayton and Richmond.....	8:15 P. M.	1:30 P. M.
Day., Toledo & Detroit Huntsville.....	5:20 P. M.	10:25 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	8:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:50 and
Eastern Night Express.....	10:00 P. M.	7:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.
Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	5:00 A. M.	12:20 P. M.
Indianapolis and Terre Haute.....	5:00 A. M.	12:20 P. M.
Decatur, Springfield & Quincy.....	12:45 A. M.	4:45 P. M.
Chicago Night Express.....	5:00 P. M.	10:40 A. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis, and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	6:15 A. M.	10:30 P. M.
Louisville and St. Louis Night Ex.....	7:10 P. M.	7:20 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES slower than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

General Ticket Agent L. M. & C. & X., and C. H. & D Railroads.

General Ticket Agent Indianapolis & Cincinnati Railroad.

General Ticket Agent Ohio & Mississippi R. R.

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MACHINERY,

OF EVERY DESCRIPTION.

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ALBERT BRIDGES.

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Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.

Steel Wire and Whalebone Tube BRUSHES.
Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES.
Glass Enameled Iron WATER PIPE
Wrought Iron STEAM PIPE.

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48 Platt Street, N. Y.

N. W. BALDWIN, MATHEW BAIRD.
M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotive Engines.

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**LOCOMOTIVE & RAILROAD
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SEWING MACHINES.

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BRANCH OFFICES:

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We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

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The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE ON BOTH SIDES, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

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Send or call for a circular, containing all particulars, prices, testimonials, etc.
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CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
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MATHEMATICAL AND PHILOSOPHICAL INSTRUMENT MAKERS,
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WOOD, MORRELL & CO., Johnstown, Cambria Co. Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
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MANUFACTURERS OF

LOCOMOTIVE TYRE,
Engine and Car Axles, Pump and Piston Rods
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And all Forgings for Railroad Machinery.

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This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished Iron is conducted at our own Works
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SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

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Wrought Iron Welded Tubes—from 1/2 inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas, Water, or other purposes, and fittings of every kind to suit the same.

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, JANUARY 15, 1863.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion.....	\$100
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
“ column, single insertion.....	5 00
“ “ per month.....	1 00
“ “ six months.....	4 00
“ “ per annum.....	8 00
“ page, single insertion.....	15 00
“ “ per month.....	25 00
“ “ six months.....	110 00
“ “ per annum.....	200 00

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THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	9.20 P. M.
Mail and Express.....	8.30 A. M.	6.20 P. M.
Columbus Accommodation.....	4.00 P. M.	11.05 A. M.
Morrow Accommodation.....	6.40 P. M.	8.05 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	8.00 A. M.	8.50 P. M.
Dayton & Sandusky.....	7.00 A. M.	6.45 P. M.
Dayton & Toledo.....	7.00 A. M.	11.40 P. M.
Richmond & Dayton.....	3.15 P. M.	1.30 P. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.55 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	8.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.50 A. M.
Eastern Night Express.....	10.00 P. M.	7.10 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	7.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.40 P. M.	10.55 A. M.
Martinsburg & Cincinnati—		
Mail.....	7.45 A. M.	5.25 P. M.
Accommodation.....	3.30 P. M.	9.55 A. M.
Ohio & Mississippi—		
Mail.....	6.15 A. M.	11.00 P. M.
Express.....	7.00 P. M.	7.10 A. M.
Indianapolis & Cincinnati—		
Mail.....	5.00 A. M.	12.20 A. M.
Chicago Express.....	5.00 P. M.	10.40 A. M.
Dayton & Michigan—		
Trinidad, Detroit & Chicago Exp.....	7.00 A. M.	11.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.55 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	8.10 A. M.	8.50 P. M.
Night Express.....	7.40 P. M.	8.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	8.30 A. M.	6.45 P. M.
Accommodation.....	6.00 P. M.	8.20 A. M.
Kentucky Central— (City time.)		
First Train.....	6.45 A. M.	10.37 A. M.
Second Train.....	2.10 P. M.	6.30 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

A WEEK OFF THE RAILROADS.

In this age of railroads and steam communications, where every point to which business or pleasure may reasonably be supposed to lead the traveling community, it is hardly to be expected that we can really appreciate the condition of portions of the country which are destitute of these facilities. Having had a little experience in this line very recently, we cheerfully give it, and it may, perhaps, recall in the minds of our readers a recollection of former days, and increase their appreciation of present advantages.

There is a corner in the State of Illinois, lying between the Illinois and Mississippi rivers, where, for nearly a hundred miles in a north and south direction, and for an average of about forty or fifty miles east and west, there is no railroad. Washed on both sides by navigable rivers, and having the reputation of a sterile, rocky soil, it has been neither as attractive to the emigrant nor as promising to railroad enterprises as other portions of that favored State. In ordinary seasons, the admirable facilities for navigation afford excellent accommodations to the traveller, as well as abundant means of carrying off surplus products. At the period of our visit—the holiday week—the ice had begun to run in the river a very little and the government being in need of boats had taken some of them into service, so that steamboat facilities were not as good as usual. The railroad trip from Cincinnati to St. Louis was quickly and pleasantly made, and after waiting but a single day at St. Louis, we got a packet up the river to our point of landing. We made the 70 miles in reasonable time, starting at 4 P. M. and being landed at 3½ the next A. M.—11½ hours, or six miles per hour. Our business led us wandering over hills and through forests, on horseback, for a few days; and such horses and such roads, and such weather, it seemed to us we had never before experienced. To-day, mild and genial as Spring, roads canals of mud, and frequent showers drenching our clothes. To-morrow, cold and cheerless, snow drifting across the frozen ruts and blinding both horse and rider. Business over, we turned our horse's head back to the landing, and after a cold ride of twenty miles with feet and hands benumbed with cold, hungry, weary and saddle worn, late in the evening, were heartily glad to find a cheerful fire in the sitting room of mine host of the inn. Time flies; and we begin to canvas the probabilities of a boat down stream. Mine host believes there may be one this very night, and recommends waiting on the river bank, with lantern in hand, to attract the attention of the pilot; but not over confident in his own knowledge, advises that we go to the keeper of the village store, from whose steps the signal must be shown. A very important personage, we had already learned, was the keeper

of the village store. Generally a man of more than ordinary intelligence, he is at once banker, dealer, forwarding and commission merchant and agent of boats and express companies, as well as post master of the town. In the instance in point, the gentleman we went to consult was all of these; naturally intelligent, well read, and thoroughly posted in the business of the county, his opinions were received with deference wherever expressed. No boat was expected till the following night, and so we went back to the hotel; and wearied and travel-worn, were soon asleep. Hardly were we fairly at rest, before mine host came running up to the door—a boat was seen in the distance. It was but the work of a moment to throw on a few articles of clothing and rush down to the river bank, swinging a lantern and hallooing to the best of our ability, but in vain. The boat was a stranger and passed on unheeding. Chagrined, disappointed, and chilled with the night wind, we had no resource left but to seek the bed again in not a very pleasant humor. The next day was spent in fruitless watching for a boat. By noon we began to think of some other mode of getting away. The nearest railroad station was forty miles away across the river; Alton was but 45 miles distant. We made an effort to hire a conveyance to carry us to either point in vain. But it so happened that a country horse doctor and horse fancier was stopping at the same house, who kindly offered to sell us the best riding horse in the county. Now a country jockey is a peculiar institution, generally a man of extraordinary good nature, willing to oblige every one at the risk of disoblighing himself; with no particular business, but a decided liking for a horse, which is at once his pleasure and his ruin. He stops a week or two here and another somewhere else, makes a trade occasionally, patches up all the ailing horses in the neighborhood, buys one or has one given to him for his trouble and then moves off to sell it. And so we looked with some suspicion on this splendid riding horse, and demurred a little at the price and the probabilities of getting through to Alton, should we be able to make a bargain. Finally, being unexpectedly called to return ten miles, we agreed to hire the animal for this trip, and if he stood this well and no boat came down that night, we would make an offer. So we were soon mounted and riding through the sleet, gaily as the circumstances would permit. Night found us back again, chilled and wet, but with it we found other parties waiting for a boat. By this time we were ready to take a boat either up or down; in any direction that would bring us to a railroad depot. A night of watching passed but no boat came; but with the morning came a drenching rain that precluded the idea of a horse-back ride, at least till the shower was over. Another trip to the village store convinced us that we might wait two or three days longer, and so

we made up our minds. We bought the horse for a little over half the first proposal, exchanged our carpet sack for a pair of saddle bags, took a letter from the keeper of the village store stating that we had come honestly by the animal and had a perfect right to sell him again, and started immediately after dinner. The first ten miles, to the ferry over the Illinois, was made in moderate time, winding along the bluff, and with little chance of losing the way, and the clear, genial sunshine compensating for the clouds of the morning. Arrived at the ferry, an unexpected stoppage blocked the path. The same wind that had cleared away the clouds had ruffled the waves, and we must wait for them to subside. By sunset we were able to cross, and a friendly resident on the other shore piloted us through the wet and tangled roads on his way to his own residence. As we floundered through the mud, he asked, "Are you a Mason?" The short reply "I am" established a friendly intercourse, and we were welcomed to a hearty meal and a little rest at his hospitable residence. With full directions for the next stage of the ride we started by moonlight, and in reasonable time made Grafton, the southern terminus of the Illinois Canal. Here we stopped to rest our animal and inquired the way, and finding the road was long with many turns and much mud, we sold our horse, saddle, bridle and saddle-bags and hired a stalwart boatman to row us in a skiff the remaining twenty miles to Alton. There is a little touch of romance in floating down a mighty river in a bright, moonlight night in summer; but when winter winds chill hands and feet, and the cold mist penetrates every seam, the romance soon fades before the stern reality and dampens the ardor of even the willing traveller in such a conveyance. So, although the full moon shone brightly on the towering casles of the Chickasaw Bluffs, which line the eastern shore of the river, and illuminated their magnificent heights and the low coves which here and there shoot through them, we took much less pleasure in the splendid scenery than we might have done under other circumstances. The skiff ride over at last, we landed safely on the levee in time for the early train for St. Louis.

We had not seen a newspaper for a week, and were astonished to find the greatest battle of the war had been fought and won for nearly a week.

If any of the many travellers on our railroads are dissatisfied with the delay occasioned by losing a single connection, we advise them to try a week away from the railroads and their annoyances. We believe they will return to railroads better satisfied than they were before. At least, such was our experience.

MICHIGAN CENTRAL RAILROAD.—The Michigan Central road earned in December:

1861.....\$200,133 00 | 1862.....\$258,633 00
Increase.....\$58,500 00

CLEVELAND & PITTSBURG RAILROAD.

The annual meeting of this Company was held at Cleveland on January 7th. The following statement of its affairs was presented to the stockholders:

The receipts and expenses of the Company for the past year were as follows:

RECEIPTS, 1862.	
Passengers.....	\$435,527 03
Freight.....	930,410 12
Mails, express, rents, &c.....	70,379 91
	1,436,317 11

The payments which have been made are as follows:

EXPENSES, 1862.	
Expenses of operation.....	\$692,084 88
Pittsburg, Fort Wayne & Chicago Lease.....	85,000 00
Interest on 1st Mortgage Bonds.....	55,720 00
Interest on 2d Mortgage Bonds.....	86,065 10
Interest on 3d Mortgage Bonds.....	81,497 50
Interest on Funded Debt Mortgage Bonds.....	26,235 00
General Interest and Exchange.....	32,651 29
New Engines and Cars.....	80,219 81
New Bridges, Station-House, &c.....	43,581 70
Leaving surplus earnings.....	327,281 03

Total.....\$1,436,317 11

The increase of receipts over those of last year is \$321,375 71, while the increase of operating expenses is only \$45,729 47.

The following is the balance sheet of the company:

Dr.	
Construction account.....	\$7,771,062 11
Personal property.....	48,118 58
Telegraph.....	13,918 72
Balance of personal accounts.....	26,366 00
Assets in hands of Receiver.....	389,191 79

Total.....\$8,231,646 96

Cr.	
Capital stock.....	\$3,832,712 16
First mortgage bond.....	800,000 00
Second mortgage bond.....	1,189,000 00
Third mortgage bond.....	1,166,000 00
Funded debt mortgage bonds.....	1,059,928 00
River Line bonds.....	20,000 00
Dividend bonds.....	75,077 53
Income bonds.....	15,500 00
Bills payable.....	94,349 27

Total.....\$8,231,646 96

The situation of the unsecured indebtedness is as follows: The River Line bonds fall due in 1887. The dividend bonds fall due between the years 1866 and 1870, mostly in the latter year. The amount actually due at the present time is the total of income bonds and bills payable, and the accrued interest on these and on the River Line bonds and dividend bonds, making the whole amount of outstanding indebtedness not exceeding \$185,000.

To meet this indebtedness the Company have on hand, remaining of the issue of funded debt mortgage bonds, \$140,000, and a balance of personal accounts amounting to \$26,369 76, in addition to which the receiver has in his hands assets, consisting of cash, bills receivable, United States certificates of indebtedness, &c., amounting to over \$300,000.

The contract made between the officers of this Company and those of the Pittsburg, Ft. Wayne & Chicago Railroad, for the consolidation of the earnings of the two roads was ratified by the stockholders of this company.

The agreement provides that the gross earnings of the two companies, from whatever source derived, shall be divided between them, Railway Company 72½ per cent, and the Cleve-

giving to the Pittsburg, Fort Wayne & Chicago land & Pittsburg Railroad Company 26½ per cent. The division is in accordance with the average amount earned by the two Companies during the past two years, and is believed to be fair and equitable. Each Company is to pay its own expenses of operation and to make its own repairs.

Both roads are to be placed under one Superintendent, to be appointed by the Presidents of the two Companies jointly. The other provisions of the agreement are intended to carry out the details of this plan. The agreement is to continue for twenty-five years.

The fact that this company competes for business with the Pittsburg, Fort Wayne & Chicago Company at every point from which that Company derives its freight and passengers, indicates a common interest which points strongly to a union of the two Companies, such as has been made.

The advantages to be expected from this consolidation are obvious. There will be no longer a competition for business, for each company is interested rateably in the earnings of the other, and it makes no difference in the result over which road freight and passengers are carried.

The business of both roads, being under the direction of one Superintendent, will be so managed as to yield the most money to the common fund with the least expense, and in this way the interest of both will be promoted. It is believed, too, that so powerful a combination as this will be will draw to itself more and more remunerating business than could be gained by the two acting independently and in competition.

The election of Directors resulted in the reelection of the old Board with the exception of one member. Mr. P. F. Grisse, of Wells-ville, was substituted for Mr. Johnson, of New York.

PACIFIC RAILROAD.

The friends of this great enterprise are urging upon Congress the passage of some very important amendments to the organic act incorporating a company for its construction. One of the most important of these is the reduction of shares from one thousand to one hundred dollars per share. Another very important amendment provides that Government will not withhold the four thousand dollars per mile of bonds, which by the organic act were to be retained as a guaranty for the building of the road. As the bonds were all to be loaned to the company for the purpose of aiding in the construction of the road, there is a propriety in giving the company the full advantage of the whole loan on so much of the road as they complete at the time of its completion. Another amendment relates to the right of way. It is presumed that these amendments, asking no new concession, will be granted by Congress.

SUBTERRANEAN RAILROAD.

It is now many years since the subject of subterranean railroad connection through large cities was first advocated in the columns of the Railroad Record. We proposed, years ago, a union tunnel under Fifth or Sixth street, as a means of connecting the Ohio and Mississippi and the Indianapolis and Cincinnati Railroads on the west, with the Little Miami and Cincinnati and Marietta Railroads on the east. The project was received with disfavor at the men regard it in any better light at the present time; and we are not aware that our railroad sent time. We have not, however, seen any good reason to change the views we then expressed. In the great city of London, England, the subterranean railway has been an established institution, and has overcome all the prejudice that existed against it, and that will be readily conceded to be no small item by those who are familiar with the English character.

In the city of New York, it is seriously proposed to run a subterranean railroad under Broadway, and thus relieve that magnificent thoroughfare from the crowd of omnibuses which now practically blockade it. There can be no question but that a subterranean railroad will inflict much less injury upon the business property of the street under which it passes than one upon the surface, or one suspended above the surface. The London Journals claim that the cost of the tunnel road will be but one fourth of that of the suspended one, and that it is practically no injury to property by which or under which it passes. Certainly the practical operation of a tunnel railroad must be less liable to obstruction than that of a surface. And that this is no small matter will be testified by every driver or conductor of a street car under our present surface system. And with the removal of these annoyances and obstructions, faster speed may be obtained, a different motive power used for that at present employed and greater economy of operation obtained.

With the experience of our trans-atlantic friends so decidedly in favor of subterranean railroads for crowded cities, a question can hardly be raised as to their practicability and value. We regard it merely as a question of time for all our great cities to adopt them, and it seems to us it would be the part of wisdom to adopt them early when they may be economically constructed and the right of way readily obtained. No city that we know of possesses such remarkable advantages for this sort of railroad connection as Cincinnati. The elevated plateau, upon which the bulk of the city is built, is sufficiently high to leave ample room to construct the tunnels clear above the water line; and the valleys at the east and west ends of this plateau afford a natural egress from

the tunnels to the surface, beyond the crowded limits, where the tunnels will hereafter be found to be a great convenience.

PANAMA RAILROAD.

Annexed is the Panama Railroad Co's statement for the year ending December 31, 1862.

Balance to credit "Income Account," after dividend, Jan. 2, 1862.....	\$279,482 35
Less amount credit "Undivided Earnings Account," per statement Dec. 31, 1861..	248,469 29
Excess of receipts over estimates for 1861.....	\$31,013 06
Receipts from Dec. 31, 1861 to Dec. 31, 1862:	
For passengers.....	\$619,013 42
For freight, merchandise.....	756,897 38
" treasure.....	147,036 55
For mail transportation.....	26,041 66
For premium on gold receipts.....	59,915 75
For interest, wharfage, light dues etc.....	28,376 44
For earnings for portion of December, estimated.....	75,000 00
Gross earnings.....	\$1,712,281 21
	\$1,743,294 27

DEDUCT

Interest on outstanding bonds \$540,000 with exchange and commission.....	\$211,792 54
Interest on convertible bonds.....	630 00
Working expenses, including materials, repairs, subsistence, labor, salaries, new cars, etc.....	423,801 31
Office expenses.....	23,695 90
New Granadian Government—Proportion of mail receipts..	10,000 00
	—\$729,349 75

Net earnings for the year.....	1,013,444 52
Dividend No. 20, paid April 5, 1862, \$4,990,00 at 3 per cent.....	\$149,700 00
Dividend No. 21, paid July 5, 1862, \$4,990,000 at 3 per cent.....	149,700 00
Dividend No. 23, paid October 5, 1862, \$4,992,000 at 3 per cent.....	149,700 00
New Granadian Government, 3 per cent.....	17,965 80
Paid to sinking fund.....	100,000 00
	716,825 80
Surplus of 1862 (after dividends) to credit undivided earnings.....	976,618,072

GENERAL STATEMENT.

Assets—construction account.....	\$3,000,000 00
Cash—in bank.....	334,608 25
Loans on demand.....	204,721 03
Investment in U. S. 7.30 per cent Treasury Notes.....	100,000 00
Investment in U. S. Government securities... Cavan, Lurbeck and Co., London—balance in their hands, £12,317 11s. 2d., at \$3.....	211,587 77
North Atlantic Steamship Company, representing five-ninths steamers Atlantic and Baltic.....	194,444 40
Sinking fund—invested.....	\$300,369 86
Sinking fund Sterling bonds redeemed and canceled, £135,400, at \$5 to £1.....	675,000 00
Steamer Guatemala, valued at.....	105,000 00
Steamer Salvador, valued at.....	175,000 00
Steam-tugs and launches, valued at.....	30,000 00
Interest in sailing vessels, valued at.....	23,000 00
Real estate on the Isthmus and Islands in the Bay of Panama, cost.....	67,694 34
Amounts due from agents and others.....	197,367 41
Coal account, amount on hand at cost.....	14,410 96
Panama Gridiron, cost.....	15,519 11

Total.....	\$10,763,723 03
Liabilities—Capital stock.....	\$4,992,000 00
Convertible bonds.....	8,000 00
	\$5,000,000 00

Sterling bonds, issued for construction, £673,000 at \$5. 3,375,900 00	
Dividend declared, payable Jan. 5, 1863.....	199,680 00
Book accounts.....	92,712 73
Trustees of sinking fund.....	975,369 84
Undivided earnings from r'd.....	\$1,195,897 21
Less exch. acct for prem. on Ster. bds....	312,222 43—
Undiv. earnings from steamers, sailing vessels, tug & launch	\$414,896 53
Less dividends \$149,720 & loss on steamers	\$27,890 87.....
	177,610 87—
	237,285 65—\$10,763,723 03

SINKING FUND IN HANDS OF TRUSTEES.

Amount invested.....	\$300,369 86
Company's sterling bonds redeemed, £135,000 at \$5.....	675,000 00
Total.....	\$975,369 86

NEW YORK CANALS.

The report of the Auditor of State of the State of New York gives the condition of the Canal funds of this State. The Auditor submits such suggestions as he considers appropriate in respect to the condition of the funds subject to his supervision, and such views in regard to the improvement of the canal revenues as experience and reflection have suggested. In his judgment, no greater improvement can now be made in our canal finances than to put a stop to wasteful expenditures and the illegal application of the public funds to unauthorized objects of disbursement.

There was in the Treasury and invested, belonging to the canal fund, on the 30th Sept. 1861,

the sum of.....	\$2,604,621 25
Rec'd during the fiscal year ending Sept. 30, 1862..	7,793,494 37

Total receipts, and available and unavailable balances.....	\$10,398,115 62
Payments during the year as shown by the tables herewith submitted.....	5,808,811 79

Leaving a balance on Sept. 30, 1862, of.....	\$4,589,303 83
Total balance invested, Sept. 30, 1862.....	4,593,706 49

The above amount belongs to the several constitutional sinking funds, pledged to the payment of the principal and interest of the stock debt of the State, including the sum for the support of the government, etc. Receipts during the year amount to \$5,854,989 67. Payments during the year amount to \$7,477,834 01. Balance to be appropriated, \$685,348 89. Total expenses, \$736,976 78. Net receipts, £1,659,611 61. Receipts from tolls etc., \$4,854,989 67. The net as well as the gross receipts, are larger than at any former period since the canals were opened. The canal stock debt paying interest September 30, 1862, amounts to \$23,981,610 25. Of canal debt sinking funds on hand there remains \$3,532,784 32. \$5,532,193 66 have been paid. Balance on hand September 30, 1862, \$1,533,374 98.

The first installment of the debt that matures under this sinking fund is July 1, 1864, when \$400,000 becomes due, and in October following \$1,200,000 is redeemable. The sinking fund for the redemption of the canal debt is \$2,892,833 57—paid during the year \$1,928,000—balance on hand September 30, 1862, \$964,833 37. Included in the above balance as now stated is the sum of \$4062,42-65, received from the surplus revenues of the canals at the close of the fiscal year covered by this report. There is also included in the above balance the sum of \$28,112 08, due from broken banks, which is now and probably ever will be unavailable. Deducting these two sums from the balance on hand at the close of the fiscal year, and there will be a deficiency of \$180,478 89 in the fund to pay the interest on the debt. This deficiency will be made good by the receipts from taxes to be collected the current year.

If, however, the State continues to receive its canal tolls, taxes and other dues in the paper currency of the country, and to pay the quarterly interest on its stock in specie or coin, it will be very difficult to estimate what the deficiency will be. The whole loan called the Floating Debt Loan, principal and interest, is secured by an irrepealable annual tax levy. Of the above balance \$276,764 76 are

set apart and invested to pay the principal maturing in 1866.

The Repair Trust Fund interest is \$9,501 22, beside the accumulations of interest which are added to the principal at the close of each six months the loan is held. When reinvested, the accumulations are added to the original deposit and loaned as principal.

Of this debt paying interest, on the 30th day of September, 1862, there was held

On United States account.....	\$22,528,782 89
On foreign account.....	1,459,827 38
Total.....	\$23,988,610 25

In 1863 and 1869 there will fall due of the principal of the canal stock debt, amount required in currency \$5,933,097 98.

This sum will vibrate as the rate of discount rises and falls.

The tolls and other canal dues are not paid in gold and silver, but in the bankable currency of the State.

FLOATING DEBT, LOAN AND TAX.—The 4th section of the act, Chap 271, of the laws of 1859, which provided for a loan of \$2,500,000, to pay the floating debt of the State, authorized and directed the levy of an annual tax sufficient to pay the interest and redeem the principal of the loan authorized within eighteen years from the time it was contracted. This loan is re-imburseable in three installments, as follows: \$800,000 July 1, 1866, \$800,000 July 1 1872, and \$900,000 July 1, 1877.

On the first day of July, 1866, the Sinking Fund will have accumulated, from these annual taxes, or from other sources, a capital of \$800,000 to pay this debt. The payment cannot be postponed. This Sinking Fund, at the close of the fiscal year, amounted to \$276,754 76.

The re-actionary movement in the toll-sheet commenced in the Spring of 1860. In January of that year several new members came into the Canal Board, who not only believed in the policy of adjusting the rates of toll on the canals for the purpose of revenue, but were ready and willing to carry that policy into full effect. The Controller, Treasurer and Attorney-General were of these new members.

Of the prospective traffic of 1863, the Auditor indulged in anticipations that have been more than realized during the season of navigation. The future demand of Europe for our surplus breadstuffs is not now so clear as then, nor are we quite certain that our surpluses for export will be near as large in 1863 as they were in 1861 and 1862. The tonnage in vegetable food alone in 1861 was only 747,573 less than the whole number of tons carried on all the canals of the State in 1847 of every description of property moved. Comparing the movement of 1860 and 1861 with former years, as far back as 1847, and we must be satisfied that our position in reference to trade on the canals since 1859 has been an exceptional one to a considerable extent. The traffic on the canals has been somewhat, but not largely, increased by the closing of the Mississippi River. This we know by comparing the grain movements from the Western States in 1860, when the river was open, with those of 1861, when it was closed.

The aggregate of \$24,712,253 67 is what has been received from the sources named and applied in payment of the completion of the public works since 1846, including payments for land damages and the expenses of engineering—a sum far exceeding the highest and widest estimate ever ventured upon by the most vehement doubter of engineering infallibility.

When in 1853, the 3d section of the 7th article amended so as to permit the borrowing of nine millions of dollars to complete the enlargement, the estimates showed this was all that would be needed for this purpose, but we have already exceeded it by \$2,160,257 87, and more is required.

In addition to the above, we have made deficiency loans, on the credit of the Sinking Fund, to pay the quarterly interest on the new enlargement debt of

\$10,500,000, to the amount of.....	\$1,500,000 00
Since 1846 we have levied and raised taxes to pay the quarterly interest on that debt, to..	3,318,418 21

Making a total of... \$4,818,418 21

The Auditor will not indulge in any extended reflections. He believes that the future of our canals is more hopeful and encouraging than we could have anticipated previous to 1860. Our public works, in many material respects, are imperfect and need improvement; but we should lay aside all thought, design or expectation of calling for aid outside of their revenues.

We have much to hope for and expect from the rebounding energies and the energetic aspirations of our people, but the strong man may be stricken down, and the experience of the past may become a bad guide for our future direction.

If we cannot and do not stop where we are, and confine our State expenditures and outlays to our actual and ordinary receipts of income and revenue, we shall act as no wise or prudent man would in his private affairs.

All, and more than all, the conveniently available resources of our State and people are needed at this moment to aid the National Government in maintaining its existence and restoring the great constitutional compact over every degree of latitude and longitude of the country that was covered by it before the Rebellion.

If this great public work is not paramount to all others, State or National, then the Auditor has placed too high an estimate on the value of the Union of all States of the Republic in reference to the present as well as the future welfare of our people and country. Every minor object and every selfish consideration should give place to the preservation of our national existence.

Respectfully submitted. N. S. BENTON,
Auditor.

ILLINOIS—ITS RAILROADS AND PUBLIC DEBT.

The annual message of the Governor of this State has the following in regard to its Railroads and public debt:

In railroads Illinois is really the first, though nominally the second, State in the Union. We now have over 3,000 miles of railroads, intersecting the State in all directions, north and south, east and west. Ten years since, we possessed in all ninety-five miles within the entire limits of the State. The cost of construction of all the railroad property in the State, at that period, was but \$1,440,507. In 1860, it was \$104,944,561. Probably the history of the world does not present such an instance of progress. Were it not for these roads the war, which closed up the Mississippi River to our commerce, would have fearfully crippled our resources. By these roads we have been enabled to send forward immense quantities of agricultural products to market. Thus the roads and canal centering in Chicago delivered, in 1861, nearly 60,000,000 bushels of grain, 675,000 hogs, and nearly 60,000 head of cat-

tle. In 1862, I learn that they will have delivered nearly 70,000,000 bushels of grain, 900,000 to 1,000,000 of hogs, and over 170,000 head of beef cattle.

If the commerce of other railroad centers could be obtained, it would doubtless exhibit an amount of business done by all the railroads in the State, which would very far exceed the travel and traffic of the Mississippi river in its palmiest days. So that we have, to some extent, been compensated for the loss of that river by those artificial and rival means of communication, which are no doubt destined, in the progress of civilization, to supersede, to a great degree, the merely natural channels of commerce. Many of our citizens, and a portion of the press of the State, have complained of the monopoly of the commerce of our State, which the railroads have possessed since the closing of the river. But I do not see how it could have been avoided. The same monopoly would have existed, on the other hand, had the railroad communication been interrupted, and that by the river only left open. The only way to prevent all such monopolies of the means of transit, or at least to mitigate their evils, is, by the encouragement of new enterprises, so that by competition we may be able to successfully oppose combinations and monopolies of all kinds. But in the end, all these matters, if left to the inevitable laws of trade and commerce, of supply and demand, will most certainly regulate themselves.

OPENING OF THE MISSISSIPPI.

Notwithstanding, however, that the railroads have, to some extent, served as a substitute for river communication, still the loss to the great Northwest in this respect is incalculable. Ten millions of our people are deeply interested in the navigation of the Mississippi. The price of every article of Western produce has been reduced in consequence of its obstruction. Our flour, wheat, corn, cattle and hogs are taxed with such rates for overland transportation as materially to reduce the prices at home. Once remove the monopoly enjoyed by the railroads, by bringing the Mississippi into competition with them, and every article of Western produce would probably command twice the price it now brings.

From the commencement of the war, I have strictly kept in view, and on all proper occasions earnestly recommended, the policy of keeping the great natural thoroughfare of the West unobstructed. I submit, herewith, a copy of the correspondence between the Governors of Ohio, Indiana and Illinois, with Gen. Scott, upon this subject. In this correspondence the Governors recommended the immediate occupation of the Ohio and Mississippi rivers by Federal troops, at Cairo, Memphis, and every important point, with the paramount idea of keeping that river open to the two hundred millions of dollars of our commerce, as a means of transportation of our munitions of war, enabling our armies to deal destructive blows upon the enemy from various bases, also, a means of strengthening our own positions and giving aid and protection to the Union sentiment of the slave States bordering upon them, by having present a sufficient force to protect loyal men in the expression of their sentiments, and in their property.

THE BANKS—CURRENCY.

The out-break of the present unprecedented rebellion found us with a circulation of bank notes, under our banking law, of over \$12,000,000; secured by State and United States stocks to the amount of over \$13,000,000. About

three-fourths of this sum was made up of stocks of the Southern states. Of course, so fast as these States threw off their allegiance, and arrayed themselves under the banner of rebellion, confidence in their credit, in a great measure, was destroyed, and their stock rapidly depreciated in value. From ninety and one hundred cents on the dollar, they soon fell to forty and fifty.

STATE DEBT.

Since the last regular meeting of the Legislature, in addition to the payment of interest, the following amount of State indebtedness has been liquidated, viz:

With the State debt fund, principal and interest.....	\$38,200 00
With the Illinois Central Railroad fund.....	20,140 93
Interest stock paid under Governor's proclamation since January 2, 1861....	12,000 00
	\$70,400 99

The amount and specifications of the remaining debt, on the 1st of December, 1862, were as follows:

Illinois bank and internal improvement stock, due after 1860.....	\$31,000 00
Illinois internal improvement stock, due after 1870.....	42,000 00
Illinois and Michigan Canal stock for N. C. R. R., due after 1860.....	3,400 00
Internal improvement scrip, payable at the pleasure of the State.....	21,293 39
Liquidation bonds, payable after 1865..	243,290 21
New internal improvement stock payable after 1870.....	1,970,966 84
Interest bonds of July, 1847, payable at the pleasure of the State.....	937,223 50
Interest stock of 1857 payable at the pleasure of the State.....	737,223 59
Three certificates for arrears of interest	1,363 83
Refunded stock (coupon bonds.) (see exhibit.).....	1,951,000 00
Normal University bonds, due after 1879	65,000 00
Thornton loan bonds, due after 1879....	171,000 00
Balance canal claims, Thornton loan....	14,524 61
War bonds due after (\$50,000 for revenue purposes).....	2,050,000 00
	\$8,625,747 80

Illinois and Michigan Canal bonds, payable in New York.....	\$1,856,400 00
Illinois and Michigan Canal Bonds, payable in London.....	1,777,822 23
	3,463,922 23
Interest certificates canal stock, unregistered.....	19,713 38
Canal scrip.....	4,039 62
	\$12,283,422 43
Macalaster and Stebbins bonds.....	53,958 94
Total debt.....	\$13,337,381 37

The receipts into the treasury for revenue purposes for two years, ending November 30, 1862, including the amount of the two mill tax and other funds transferred to the revenue, in accordance with the act of February 8, 1861, and the amount of said funds paid directly to the credit of revenue by virtue of the same act, together with the receipts of revenue from all other sources, as appears from the report of the Auditor, is \$1,775,239 87.

Of this amount there has been paid in the same period for the ordinary and contingent expenses of the State government, as shown by the Auditor's report, the sum of \$864,007 04.

For special appropriations, including the carrying on of the works of the new penitentiary at Joliet, and improvements of various kinds constructed at the State charitable institutions at Jacksonville, the further sum of \$531,271 83.

There has also been paid the further sum of \$5,263 81, in redemption of warrants issued previously to December 1, 1860.

The above sums, paid out, amount in the aggregate to \$1,400,542 68, leaving in the treasury, December 1, 1862, \$374,697 19.

INTERCOLONIAL RAILWAY.

Mr. Wm. H. Morrell, the correspondent of the Montreal Gazette, in a letter to that journal, gives the following statement of the agreement made between the Provincial delegates and the government of England, in the subject of the Intercolonial Railway, as projected through New Brunswick, Nova Scotia and Canada.

1st. The Quebec Conference proceedings were confirmed, viz: proportion of cost to be 5-12ths to Canada and 7-12ths to Nova Scotia and New Brunswick. The line to be selected or approved by the Imperial Government—and if constructed by the Government, Canada to select two Commissioners, Nova Scotia one and New Brunswick one, and these four to elect a fifth. A free grant of land by each province for track. Profits to be shared or losses borne by each in proportion to stock held.

2d. The Colonial Governments to be left free to construct the road by Commissioners, or grant a subsidy to a company.

3d. The Secretary of State for the colonies to name one of the three engineers to be appointed for preliminary survey.

After several meetings in London on the subject, the following results were arrived at: A £3,000,000 standing loan, payable as follows:

£250,000 payable in ten years; 500,000 payable in 20 years; 1,000,000 payable in thirty years; 1,250,000 payable in forty years; with a sinking fund to commence in 1873, but instead of the moneys arising being invested in consols, Mr. Gladstone has agreed to allow the sinking fund to be invested in Colonial securities. He will not undertake to get the measure through Parliament without a sinking fund.

The Lords Commissioners of Her Majesty's Treasury undertake, however, to raise the money upon their own debentures, which will command the money at the very lowest rate, without charge or commission—unless a portion should be raised through the Bank of England, in which case only $\frac{1}{2}$ per cent is to be charged.

This is an important feature, and will not only make the guarantee equal to an absolute loan, but will save to the Colonies the commission of 1 per cent and $\frac{1}{4}$ per cent brokerage, formerly paid to bankers in London, amounting on this loan to £37,500, besides the difference in rate of interest between guaranteed loan and Imperial debentures.

Nova Scotia and New Brunswick, I understand, have consented to this arrangement, but still join the Canadian delegates in asking that the sinking fund shall be dispensed with. This is now the only important point of difference between the Colonial and Imperial Governments. Mr. Gladstone appears to be willing to do almost anything but dispense with these two short words "sinking fund," and alleges that there is no use of going to Parliament without them.

I think there is little doubt this important work will go on—and that before the close of another year.

CLEVELAND & TOLEDO RAILROAD.—The following are the earnings of the Cleveland and Toledo Railroad Company for the month of December:

1862.....	\$160,710 00	1861.....	\$103,253 64
Increase.....			\$57,456 36

PENNSYLVANIA—ITS FINANCES.

The annual message of the Governor of Pennsylvania gives the following abstract of the finances of this State:

Balance in Treasury, Nov. 30, 1861.....	\$1,351,605 72
Receipts during fiscal year ending Nov. 30, 1861, were from—	
Ordinary sources.....	\$4,047,822 39
Six per cent loan, act May 15, 1861.....	387,850 00
From banks, equivalent for coin.....	140,768 30
Refunded cash, military.....	29,566 42
U. S. Government.....	605,740 15
	\$5,211,747 63
Total.....	\$6,763,353 35
Payments.....	4,590,509 26

Balance in Treasury Nov. 30, 1862.....	\$2,172,844 10
Receipts from ordinary sources:	
For year ending Nov. 30, 1862.....	4,047,822 39
For year ending Nov. 30, 1861.....	3,017,645 57

Excess for 1862.....	\$1,040,176 82
Payments for ordinary purposes—excepting interest—	
For year ending Nov. 30, 1861.....	1,118,662 93
For year ending Nov. 30, 1862.....	1,023,344 77

Decrease in 1862.....	\$95,317 16
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And in view of this healthy condition of the State finances, the Governor invites the attention of the Legislature to a revision of the revenue laws, in order to lessen the burden of taxation.

Public Debt of Pennsylvania, Dec. 1, 1861..	\$40,580 666 08
Received at Treasury, on Military Loan, act of May 15, 1861.....	887,850 00

Total.....	\$40,968,516 08
Deduct redemptions in fiscal year ending Nov. 30, 1862.....	520,302 26

Public Debt, Dec. 1, 1862.....	\$40,448,213 82
Sinking Fund securities for its extinguishment.....	19,781,000 00

In addition to which not less than a million and a half of dollars is expected to be appropriated during the coming year toward payment of the debt. The Sinking Fund reductions of the debt during the last year have been \$262,801 61. Attention is called to the reports of the Revenue Commissioners, State Treasurer and Auditor-General, for financial details, and those of the Surveyor-General, Superintendent of Common Schools and State Librarian for account of the Departments under their care.

Pennsylvania paid to the United States her quota of the direct tax, amounting to \$1,946,719 33, partly in claims on Government and partly in cash. About \$300,000 are still due the State from the General Government.

The Philadelphia and Erie Railroad Company has received three out of the five millions of bonds deposited in the State Treasury according to the act of May 7, 1861, and with the proceeds has completed fifty-two miles of road; 199 miles of the whole road are finished, the remaining eighty-nine being graded and ready for the iron. The unexpired bonds are amply sufficient to complete the road.

The interest on the State debt was paid in August last in specie or its equivalent, and the Governor recommends that the credit of the State should be in future similarly preserved. Of incorporated banks the Governor thinks there are already more than enough.

GALENA & CHICAGO UNION RAILROAD.—The detail of the earnings of the Galena and Chicago Union Railroad for week ending Dec 31 is:

	1861.	1862.	
Freight.....	\$21,545 25	\$27,071 91	Inc. \$5,486 66
Passengers..	9,124 03	9,207 29	Dec. 218 74
Mails, &c....	8,369 30	6,500 00	Dec. 1,869 30
Total.....	\$39,320 58	\$42,779 20	Inc. \$3,458 62
For the month, 1862.....			\$143,497 65
For the month, 1861.....			122,308 96
Increase.....			\$21,188 69
Corrected earnings for previous month.			159,530 35

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	100	48	\$	\$	\$	\$	\$	Sept. 30, 1860	Maryland Sterling.	3,000,000	5			
Baltimore and Ohio.....	Md.	100	380	13,111,800	10,781,833	566,07	3,922,203	2,305,788		Mortgage.....	2,500,000	6	100	1825	
do do										".....	700,000	6		1820	
do do										".....	1,128,500	6	102	1875	
do do										".....	1,000,000	6	103	1867	
do Washington Branch.....	Md.		30	1,650,000						2d ".....	160,000	7		1870	
Bellefontaine and Indiana.....	Ohio & Ind		118	1,859,813	1,256,750	139,139	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7	55	1866	
do do										".....					
Buffalo and State Line.....	N.Y. & Pa.	60	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860	2d ".....					
do do										".....					
Burlington and Missouri.....	Mo.		75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	593,000				
Camden and Amboy.....	N. J.	138	96	3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	367,000	6	100	1864	
Central Ohio.....	Ohio.		137	In hands of Receiver.	3,673,000	1,126,438	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7		1861	
do do										1st ".....	800,000	7		1864	
do do										2d ".....	801,000	7	76	1865	
do do										3d " S. F.	950,000	7		1865	
do do										4th " S. F.	1,365,800	7		1876	
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d ".....	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	85	232	In hands of Receiver.	6,168,520	730,000	994,569	235,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d ".....	1,535,000	7			
do do										3d ".....	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report	received.					1st Mortgage.....	400,000				
do do										2d ".....	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		194	2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F.	1,250,000	7	104	Feb. & Aug.	
do do										Gen'l 1st Mortgage.	3,000,000	7	77	Feb. & Aug.	
do do										2d ".....	2,000,000	6	44	May 1.	
Chicago and Rock Island.....	Ills.	88	175	5,603,000	1,397,000		1,164,018	455,963	June 20, 1861	1st Mortgage.....	2,000,000	7	105	1870	
Chicago, Burlington and Quincy.....	"	100	138	4,689,340	4,814,515		1,514,428	761,630		Cons. 1st Mort. S. F.	2,172,000	8	118	1873	
do do										" 2d " S. F.	813,000	8	118	1890	
do do										1st Mor. Chi. & Aur.	399,000			1867	
do do										2d " " " "	303,000	7		1869	
do do										1st " Cent. Mil. Tract	392,000	7		1864	
do do										2d " " " "	245,000	8		1868	
Chicago, Iowa and Nebraska.....	Ind.		82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
Cincinnati, Hamilton and Dayton.....	Ohio.	105	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d ".....	950,000	7			
Cincinnati Wilmington & Zanesville ..	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,304,000	7	100	1880	
do do										2d ".....	532,000				
do do										3d ".....	104,000				
do do										Income.....	305,509				
Cleveland and Mahoning ..	Ohio.	68	161	1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d ".....	469,000	7			
do do										3d ".....	344,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	68	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	100	1860	
do do										2d " M. L. or 1st Ex.	1,182,000	7	96	1873	
do do										3d 2d Ex.....	1,165,000	7	81	1865	
do do										4th 3d Ex.....	1,154,000	7	73		
Cleveland and Toledo.....	Ohio.	67	148	3,343,800	3,850,670	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	359,000	7	103	1867	
do do										1st " " 2d Div.	263,000	7		1872	
do do										2d " " " "	265,000	7		1862	
do do										1st " Tol. Nor. & Cleve	521,000	7		1863	
do do										2d " " " "	293,300	7		1864	
do do										Junction Income..	44,509	7		1862	
do do										C. & T. Income.....	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	145	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	145	98	3,000,000	1,602,000	none	1,063,403	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	106	1861	
do do										2d ".....	303,000	7		1862	
Columbus and Xenia.....	Ohio.	115	541	1,490,000	290,700	50,500	See L. Miami.			Dividend.....	272,700		100	1860 to 1866	
Columbus, Piqua and Indiana.....	"		103	In hands of Receiver.											
Dayton and Michigan.....	"		142	2,176,666	2,512,000	299,267	375,002	212,107	Mar 31, 1860.	1st Mortgage. . .	300,000	8			
do do										2d ".....	2,212,000	8			
Dayton and Western.....	Ohio.		38	307,240						1st Mortgage.....	300,000	7	50		
Detroit and Milwaukee.....	Mich.		186	No report	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	2,500,000	7	90	1875	
do do										2d ".....	1,000,990	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.		111	No report											
Dubuque, Marion and Western.....	"		51	No report											
Eaton and Hamilton.....	Ohio.		36	469,762	728,853	152,694	152,398			1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.		132	986,051	1,219,100	249,868	124,140	43,865	Dec. 31, 1860.	".....					
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d ".....	180,000				
Galena and Chicago Union.....	Ills.	90	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000		104	1862 & 1863	
do do										2d ".....	1,520,000		100	May 1, 1875	
Great Western	Ills.		175	1,600,000	2,391,000		435,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.		84	400,000	No report										
Greenville and Miami.....	Ohio.		32	300,000	473,000	75,000	63,141	13,573		Land Mortgage...	5,000,000				
Hannibal and St. Joseph.....	Mo.	206		1,041,066	10,554,000	220,336	996,907	512,933	Sept. 1, 1860.	Mortgage Conv....	1,354,000		65		
do do										1st Mortgage.....	927,000				
Hartford and New Haven.....	Conn.		62	2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	4,000,000	7	118	1869 & 1870	
Hudson River.....	N. Y.	93	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	2d S. F.	2,000,000	7	114	1870	
do do										3d ".....	1,840,000	7	101	1875	
do do										Optional.....	28,000	7	109	1869	
do do										Construction.....	12,885,000	7	100	1875	
do do										".....	4,115,000	6	97	1875	
do do										Debentures.....	42,740	7	56		
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000				
do do										2d ".....	578,000	10			
do do										Income.....	38,700	10			
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,284	140,689	448,858	230,634		1st Mortgage.....	500,000	7		1866	
do do										2d ".....	400,000	7	90		
do do										Real Estate Mort.....	200,000	7	90		
Indianapolis Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	1st Mortgage.....	649,984				
do do										2d ".....	314,000				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report								
Iron.....	Ohio.		13	118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quoted per 100	Value of Road	Capital paid in.	Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount	Rate of Int.	Quoted per 100	Due.	
Iron Mountain.....	Mo.	83 1/2		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000	7 75	1861	
Jedersonville.....	Ind.			1,015,907	681,000	.....	302,006	122,797	Dec. 31, 1860.	1st 249,000	7 70	1861		
do										2d 392,000	7	70	1873	
Kentucky Central (Covington and Lexington).....	Ky.	99		Sold out under mortgage	2,930,000	337,632	426,408	227,534		1st Mortgage.....	160,000	6		
do										1st 260,000	7			
do										2d " Conv.	1,000,000	7		
do										3d " 600,000	7			
La Crosse and Milwaukee.....	Wis.	300		In hands of Receiver.						1st Mortgage E. D.	903,000	89		
do										2d " E. D.	1,000,000			
do										1st Land Grant W D	4,000,000	21		
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000	No report								
Lexington and Frankfort.....	Ky.	29		514,433	130,000	107,944	43,267	June 30, 1861	1st Mortgage.....	130,000	6			
Little Miami.....	Ohio.	65				1,330,050	529,981	Jan. 1, 1862	1st Mortgage.....	1,300,000	6	1863		
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519	245,910	98,679	June 30, 1861	City Loan.....	174,000				
do										1st Mortgage.....	248,000			
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	July 1, 1861.	1st Mortgage.....	2,000,000	7			
do										1st " Lebanon Br.	400,000			
do										1st " Memphis Br.	500,000			
Louisville, New Albany and Chicago..	Ind.	288		2,800,000	3,000,000	200,000	645,827	371,402						
do														
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,503	99,090	Dec. 31, 1860.	1st Mortgage.....	600,000	7	1861	
Marietta and Cincinnati.....	Ohio.	208		8,561,213	190,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7	1868	
do										2d " 2,000,000	7			
do										3d " 1,500,000	7			
do										Sterling Income.....	333,000	4		
Michigan Central.....	Mich.	97	384	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	Domestic 928,617	6	98 1/2	1872	
do										1st Mortg' Sterling	467,483	8	84	1869
do										1st " Conv.	500,000	8	96	1860
do										1st " unconv.	250,000	8	106	1869
do										1st " Dollar Conv.	2,598,000	8	118	1862
do										1st " S. F. Conv.	4,153,000	8	108	1860
Michigan South'n & North'n Indiana	Mich &	51	246	9,018,200	9,714,704	437,886	2,075,459	1,039,829	Mar. 31, 1861.	Mort. Mich. So.	991,000	103	100	1860
do										" Nor. Ind.	985,000	103	100	1861
do										" Goshen Line.	1,168,000	100	100	1868
do										S. F. Toledo 2,850,000	103 1/2	101	1885	
do										2d Mortgage 2,465,000	8		1877	
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8		
do										2d " 200,000	8			
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8		
do										2d " 600,000	8			
Milwaukee and Prairie du Chien.....	Wis.	48	192	4,944,000	2,556,000	883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	104	1891	
Milwaukee and Western.....	Wis.	71		No report										
Mississippi and Missouri.....	Iowa,	55		No report						1st Mortgage Conv.	1,000,000	7	96	
do										2d " S. F.	400,000	8		
do										Oskaloosa Div.	1,425,000	7		
do										Land Grant.....	7,000,000	7		
New Jersey.....	N. J.	31		4,397,800	688,000	902,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000	7	109		
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.					
New York and Erie Pref.....	N. Y.	104		Sold under mortgage		5,590,916	1,979,408	Sept. 30, 1860	1st Mortgage.....	3,000,000	106			
do		73							2d " 4,000,000	111				
do									3d " 6,000,000	107				
do									4th " 4,900,000	109				
do									5th " 1,792,500	103				
New York and Harlem Pref.....	Conn.	69	138	5,717,190	6,055,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	109 1/2	1873
do		35								2d " 1,000,000	7	105	1864	
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	6	94	Dec. 1, 1866
do										" 978,000	6		Oct. 1, 1873	
New York Central.....	N. Y.	108	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.	7,925,000	6	106	Oct. 1, 1883
do										Mortgage.....	3,000,000	6	115	June 15, 1864
Northern Central.....	Nd.	59	138	2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,086,500	6		
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6		
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased.	9,880,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500			
do										3d " 316,995				
do										Construction.....	4,637,920			
do										Income.....	3,591,185			
Ohio and Mississippi, Western Div....	Ills.	148		3,292,403		No report								
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000	6		
do										" " S. W.	2,800,000	6		
do										Construction.....	4,500,000	6		
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,905,000	6	104 1/2	1888
do										2d " 2,319,000	6	98 1/2	1875	
do										2d " Sterling	1,957,440	6		1873
do										State Works.....	7,200,000	5	89	
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report							
Philadelphia, Wil. and Baltimore.....	Del.	50	98	5,600,000	2,340,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6	90 1/2	1884
do										Improvement.....	119,000	6		1863
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	67	467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	1st Mort. O. & P ..	1,000,000	7	111	1865
do										2d " 750,000	7	99	1868	
do										1st " O. & I.	1,000,000	7		1872
do										2d " 380,000	7		1873	
Pittsburgh and Connellsville.....	Pa.	49		1,755,226	1,292,700	67,869	80,553	29,600	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000			
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,328	220,850	68,438	May 10, 1861.					
Sandusky, Dayton and Cincinnati. .	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856
do										" 997,000	7		1866	
do										" 1,000,000	7		1875	
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,034	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1886
do										2d " 500,000				
do										1st Mortgage.....	1,500,000	7		1870
do										2d " 900,000	7		1865	
do										1st Mortgage Conv.	1,000,000	7	104	1862
do										2d " Conv.	2,000,000	7	89	1868 & 1870
do										1st " Bel. & Ill.	517,000	7		1873
Terre Haute and Richmond.....	Ind.	105	73	1,381,450	230,000	none.	377,022	216,163	Dec. 1, 1861.	1st Mortgage.....	230,000	7	106	1866
do										1st Mortgage.....	3,400,000	7	98 1/2	Aug. 1, 1863
Toledo, Wabash and Western.....	Ohio & Ind	40	243	2,123,500	5,096,049	52,389	433,546			2d " 8,590,000	7	90	Nov. 1, 1878	
do		80								Mort. Coupons....	24,449	7		1860 to 1865

IRON ORES AND COAL IN THE UNITED STATES.

We find in the *Scientific American* the following interesting letter written by an English iron manufacturer to a friend in Buffalo, N. Y. As the testimony of a practical manufacturer it is worth perusal. He says:

SIR.—Agreeably to my promise I write to you. I am charmed with Canada. The people are active, thriving and industrious, and are destined to become a powerful community in time. As yet manufacturing is in its infancy, and on every hand you see evidences of the Colonial State resting upon the mother country—looking over the water for what should be provided at home. But for the "Reciprocity Treaty" Canada would now be in a poor state.

I promised to tell you what I thought of the iron trade in America. I find that coal of the finest kind for iron smelting, &c., abounds in Eastern Pennsylvania; but there is a great want of good and cheap iron ores in or near the coal-fields, so much so that the most prosperous works are hundreds of miles away from the source of the fuel. Much iron is made near Harrisburgh, of inferior quality, from ore found in vast abundance near Lebanon, which are mined for a trifle. Good ores abound in New Jersey, but their extraction is somewhat costly as they lie beneath the water-courses mainly and have to be regularly mined. Coal for their reduction is not very expensive, still the iron is not made very cheaply. In the bituminous regions of Pennsylvania ores of good quality do not abound, and but few seams of coal are found to be suited to the smelting furnace. In one or two places a cheap but poor iron is made. Ores are not found around Pittsburgh, though I had, till I visited the place, an idea that it was the seat of your iron trade. The business there is a forced one; while charcoal could be had, it was a good point for the manufacture; but now the few smelting furnaces procure their chief supply of iron ore from Lake Superior, and sometimes from as far as the Missouri iron mountain.

There is in Ohio, near Portsmouth, a great abundance of tolerable ore and plenty of coal; but the coal is utterly unfit for smelting, and when the forests cease to yield charcoal no good iron can be made there.

In Missouri, where iron ore abounds, mineral coal suitable for smelting is not found. The coals of Ohio (except one rare seam in the east) Kentucky, Indiana, Illinois and Iowa are not fit for use in smelting iron; the ores of these latter-named States are those of the coal measures.

New York State, in the north-east and south-west, abounds in excellent ores (primitives) and is within reach of excellent smelting coals. The same coals can be cheaply delivered on the lake ports, and equally cheaply can the pure and rich ores of Lake Superior be delivered at those ports.

In my opinion the main seat of your iron manufacture will be on the great lakes, at places where the only good smelting coals you have in any abundance can be delivered by water transport at low prices. This idea, probably, will be thought visionary, but time will prove its soundness. It is not known, perhaps, that English and Welsh iron-masters now procure large quantities of iron ore from foreign countries, and from counties in England many hundreds of miles from the works where they are used.

I found but one place in all America (that

was near Harrisburgh) where crude iron could be made for less cost than you are now making it in your city. Very good and reasonably expensive iron is made along the Hudson river, but they have no such good ores as those of Lake Superior. Your town is destined to be a great iron-producing one, and your waters have many equally fitting places for that production.

Hoping and praying that the shadow of the great Republic may never grow less, I remain, yours truly,

Montreal, C. E., Nov. 22, 1862.

MICHIGAN—FINANCES AND DEBT

The annual report of the Treasurer of this State gives the following statement of its financial condition, in Nov. 30, 1862:

The total amount of receipts of the offices for the fiscal year is.....	\$1,124,595 10
The balance against the treasury and in my favor November 30, 1861, was.....	\$27,179 79
The total payments for the year are.....	\$96,62 69
Leaving a balance in the treasury of.....	\$1,124,595 10

STATE DEBT.

The funded debt of the State is as follows:

1. Full paid "\$3 000,000 loan" bonds 6 per cts., due January 1, 1863.....	\$ 177,000 00
2. Adjusted bonds, 6 per cts., due Jan. 1, 1863.....	1,746,185 00
3. Temporary loan, 7 per cts., due Jan. 1, 1878.....	50,000 00
4. Renewal loan, 6 per cts., due Jan. 1, 1878.....	216,000 00
5. Canal bonds, 6 per cts., due Jan. 1, 1879.....	607,800 00
6. War loan, 7 per cts., due Jan. 1, 1886.....	100,000 00
7. Outstanding Internal Improvement Warrants.....	3,553 75

FUNDABLE DEBT.

8. \$140,000 outstanding part paid \$1,000,000 loan, which, when funded, will amount to.....	60,999 80
Total of funded and fundable debt....	\$2,981,038 55

During the year war loans were sold to the amount of \$153,150 62. The trust fund debt now amounts to \$964,359 85. During the year the balance of the penitentiary bonds, amounting to \$13,000, has been paid. The most eminent success has attended the effort to exchange the bonds of the State maturing the 1st of January, 1863. A tax of twenty thousand dollars was levied on the tax of 1862, applicable to the sinking fund of the two million dollars of which the treasurer has a high opinion. In concluding his report, concise as it is clear and satisfactory, Mr. Owen says: "This wise and liberal provision for the gradual but certain retirement of our bonds has had the effect to advance their value in the market, and to materially promote the credit of our State, which is soon to take rank among the most favored in the land. It is, therefore, respectfully suggested that no legislation hereafter should be permitted, the effect of which would alienate these funds from the object contemplated under the law above referred to." Our State finances, under the judicious management of Mr. Owen, are evidently in a sound and healthy condition.

BUFFALO, NEW YORK & ERIE RAILROAD.—

The earnings of this road for the last three months as compared with the corresponding three months, a year ago, are as follows:

October, November and December, 1862.....	\$353,838 00
1861.....	\$31,624 00
Increase.....	22,208 94

Or nearly 10 per cent over the earnings of the same period a year ago.

PHILADELPHIA & ERIE RAILROAD.—Governor Curtin, of Pennsylvania, in his annual message, makes the following mention of this work:

On the 20th of February last, I issued my warrant authorizing the State Treasurer to deliver to the Philadelphia and Erie Railroad Company one thousand of the bonds deposited with the State in conformity with the act of May 7, 1861. On the 20th of November I issued a similar warrant. Both warrants were granted, after receiving reports from John A. Wright, Esq., the commissioner appointed for the purpose, the proceeds of the bonds previously issued had been appropriated in accordance with the provisions of the law. The Company has now received three of the five millions of bonds deposited in the State Treasury. With the proceeds of the bonds issued fifty-two miles of the road have been completed, making, with what had formerly been finished, a total of one hundred and ninety-nine miles, leaving ninety-nine miles unfinished, of which nearly all is graded and ready for the iron. The bonds still in the Treasury will yield an amount ample to complete the road, and thus open this important route of trade and commerce. The development of the vast mineral and other resources of our north-western counties by this means will undoubtedly in a few years render valuable the securities of the Sunbury and Erie Railway Company, now forming part of the sinking fund of the commonwealth.

ST. LOUIS, JACKSONVILLE & CHICAGO RAILROAD.—This is the name of a newly organized road: the result of a consolidation of the Tonica & Petersburg, and the Jacksonville, Alton & St. Louis Railroads by a vote of the stockholders in both interests. An election for Directors, held on the 10th instant, resulted in the appointment of the following gentlemen:

George Straut, Peoria county; Josiah Sawyer, Nathan W. Green, Tazewell county; W. T. Green, Wm. T. Beekman, Menard county; Alex. McDonald, Stephen Dunlap, Morgan county; L. E. Worcester, Geo. Wright, Greene county; Joseph G. Scott, Wm. Shephard, Jersey county.

The new Board organized by electing Geo. Straut, Esq., President; Wm. T. Beekman, Superintendent; Jas. E. Berdan, Treasurer, and Charles D. Hodges, Secretary.

Perfect harmony prevailed, and each officer was elected by a unanimous vote.

The road is already in operation from Petersburg, Menard county, south forty-four miles to Manchester, which is below Jacksonville. Materials are on the ground for completing it to Whitehall, in Greene co., eight miles further. From Petersburg to Washington, where it strikes the Logansport, Peoria & Burlington road, two-thirds of the grading is done, and it is claimed this part of the road will be running by September next. About one million dollars have been subscribed along the line, and the financial condition of the new company is represented as good. The road will pass through and develop some of the best portions of the State.

TOLEDO & WABASH RAILROAD.—The following are the earnings of the Toledo and Wabash Railroad Company for December:

1862.....	\$19,915 16
1861.....	\$92,573
Increase.....	\$17,341 43

The total earnings for the year are:

1862.....	\$1,373,633 45
1861.....	\$1,162,600 45
Increase.....	\$211,953

RAILROAD TYRE.

We are indebted to Messrs. Prosser & Son, of 28 Platt st., New York, for a lithographic work, containing full sized sections of the railroad tyres of the principal railroads in England, France and Germany, as ordered from the works of Fried Krupp, at Essen, in Rhenish Prussia. These cast steel tyres are made without a weld and are highly spoken of by those who have used them. For driving-wheels, a quality of cast steel not so hard but more tenacious than that used for axles is employed. The cast steel axles of Mr. Krupp are well known in this country. Mr. C. C. Dennis, formerly of the Buffalo & State Line Railroad, gives the following testimonial in favor of the cast steel axles:

In regard to those axles I purchased of you for the *Buffalo and State Line Railroad*, my recollection is as follows: Their extreme length is 6' 6", 6 1/2", which is the proper length for 1' 11", 8 1/2" gauge. Their diameter were 3 1/2" and 3 3/4" inches, severally. They were put in a truck of a powerful engine, weighing over thirty tons. The weight on the truck, including the weight of the truck itself, was twelve tons. In this position they have been run 100,000 miles (one hundred thousand miles), more or less (probably more). The engine is a passenger one and always run at a high speed. The axles are half to three fourths of an inch less in diameter than iron axles should be for the same service. They have never been sprung a particle. The bearings have been reduced by wear about 1/32 (one thirty-second of an inch). They have saved their entire cost *each*, in brass, in oil and the saving of friction, and are now worth ninety per cent of their original value. And, as they had run 80,000 miles (eighty thousand miles), or more, when I bought them, they have already endured a service that would have destroyed four or five sets of best quality of iron axles, to say nothing of the lives and property that have been saved from destruction.

For all railroad purposes, we believe it is strict economy to use the best material. By the employment of steel in the place of iron, wherever it is practicable to use it, much weight is saved and a more reliable material obtained.

Messrs. Thos. Prosser & Son are the sole agents of Mr. Krupp in this country.

PITTSBURGH, FT. WAYNE & CHICAGO RAILROAD.—The approximate earnings of the Chicago Railway during the month of November ultimo, compared with the same period of last year, were as follows:

	1892.	1891.	Increase.	Decrease.
Freight.....	\$276,068 61	\$201,909 32	\$75,055 69	....
Passenger.....	106,113 77	89,752 66	25,421 09	....
Express.....	2,571 40	4,577 57	....	\$2,006 16
Mails.....	7,824 10	7,825 00	....	....
Rent of R.C.V.	7,000 00	7,000 00	....	....
Miscellaneous.....	1,300 75	642 01	658 74	....
Total.....	392,916 27	392,759 91	60,226 36	....
Per. from Jan. to Oct. 30, 1892.....	\$200,000 00	\$242,700 00	\$22,700 00	....
Tot to Nov 30, 1892.....	1,372 0 9 27	2,229,229 76	612,179 51	....

Increase for November, 194 per cent; average increase to November 30, 23 1/2 per cent.

MONETARY & COMMERCIAL.

The past week has been one of unusual excitement in financial circles. The excitement began early in the week with the announcement that the Committee of Ways and Means had agreed upon the policy of issuing \$300,000,000 more of legal tender notes, in preference to adopting the recommendation of Secretary Chase to issue but \$50,000,000 additional of these notes and create a demand for United States Stocks as a basis for banking and bank issues. We are not informed of the nature of the arguments that have influenced the committee, but with the light before us we should incline strongly to the belief that the plan proposed by Mr. Chase was much the wiser plan of the two. Mr. Chase in his report gave strong reasons for the policy he recommended, and sustained his arguments by indisputable facts. One great argument in its favor is the fact that it proposes only a limited issue of notes and will revolutionize the banking system by a gradual process, substituting institutions well secured by deposit of United States stocks, in lieu of the present heterogeneous system. The additional issue of legal tender notes would be so small as to cause no serious inflation, while the market created for United States Bonds, would gradually absorb a very large amount of them and would leave the banking business of the country in the hands of individuals of means and capacity, just where it ought to be. We shall regard it as a great misfortune if Congress attempts the sudden inflation now proposed in preference to the safer plan of the Secretary of the Treasury. It is quite certain that the announcement of the plan of the Committee of Ways and Means has been the occasion for such a tumult of excitement and speculation as was never before known. Stocks of all kinds went up, gold and foreign exchange followed, and to-day the premium on gold may be quoted safely at 40 buying and 43 to 45 selling, and foreign exchange 55 premium. In this state of things merchandise will soon follow. The New York Tribune says:

A portion of the excitement was due to dispatches from Washington announcing that the Committee of Ways and Means had agreed to the issue of \$300,000,000 of legal tender notes; but much of the real strength of the market comes from the almost universal acceptance of the impression that there is a still further rise in market values before us, growing partly out of the increasing intrinsic values of the stocks sold at the Board, partly out of the expansion of paper money, but in a considerable degree out of the awakened spirit of speculation which is gradually pervading nearly all classes of the people, and having been thus far wonderfully successful, will no doubt continue to grow in strength until the crash comes, which sooner or later will accompany the efforts to resume specie payments.

The Cincinnati markets have partaken somewhat of the excitement at the monetary center. There is however here, more a desire to keep within safe bounds, and to follow rather than outstrip eastern speculations. There is a strong disposition to hold gold and silver. Exchange on the East has been quiet. So long as legal

tender notes form a portion of our currency, there can not be any very great fluctuations in domestic exchange. We quote rates as follows:

	Buying.	Selling.
New York.....	1/2 to 1/2 dis.	par.
Philadelphia.....	1/2 to 1/2 "	par.
Boston.....	1/2 to 1/2 "	par.
Gold.....	38 to 40 prem.	43 to 45 prem.
Silver.....	25 to 27 "	
Demand Notes.....	35 to 37 "	

The demand for money from business houses on commercial paper is light, and first class names pass readily at the usual rates. The principal business of bankers seems to be in quartermaster's checks, which are quoted from 3 1/4 to 4 1/4 discount.

The Lafayette bank, one of the oldest Banking Institutions in this city, has been reorganized under the general law of the State. Its officers are the same as under the private copartnership:—President, George Carlisle; Vice-President, Joseph C. Butler; Cashier, W. G. Gano; Assistant Cashier, Henry Peachy.

General business has been rather dull, although there is greater activity than during the previous week. In Dry Goods especially there has been an improvement, based principally upon fears of an increase in prices.

Flour is steady, although transactions have not been large. We quote superfine at \$5 30 to \$5 40; Extra \$5 40 to \$5 50; Family \$5 60 to \$5 70; Fancy \$5 75 to \$6 00. There is a disposition to hold for a rise. Wheat is firm at \$1 05 to \$1 07 for Red; 1 08 to \$1 10 for Ohio White, and \$1 15 for prime Kentucky White. Corn is quiet at 44 to 45c in bulk in the ear, and 46c, shelled. In sacks, 57 to 58c. Oats are firm at 53 to 54c in bulk, and 63 to 65c in sacks. Barley is firm at \$1 33 to \$1 35 for prime Fall, and \$1 20 to \$1 25 for Spring.

Pork packing has fluctuated with the weather and the premium on gold. The weather for a portion of the week was entirely too warm for killing. It is now colder and snow is falling freely. Receipts have been liberal and prices have ranged from \$4 00 to \$4 80. The Price Current foots up the receipts of the week at 42,015, and for the season at 562,582.

Mess Pork is in light demand, but is held firmly at \$11, to \$13. Lard 8 1/2 to 8 3/4c for country, and 9c to 9 1/2c for city.

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861.

Through Distance 260 Miles;

42 Miles Shorter than any other Route

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C., H. and D. Depot, at 8:00 A. M., 7:00 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnett House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run direct through to Chicago without rebelling or transhipment.

JOHN BRANT, JR., Superintendent.

C. E. FOLLETT,

General Ticket Agent, Richmond, Ind.

G. W. CHAPMAN, Gen. Freight Agent,

3. Randolph Street, under Sherman House, Chicago, Ill.

CAST STEEL WORKS. OF FRIED. KRUPP,

At ESSEN in Rhenish Prussia.

Patent Railway Tires, without a weld. Axles, Cannon, Anchor Flukes, Propeller Blades and Shafts. Cranked Axles and Shafts, up to Twenty Tons weight.

CAST STEEL IN BARS, BEST QUALITY,

Suitable for Axles, Shafts, Rails, Tools, Dies, Needle and Music Wire, Fine Cutlery, &c,

KRUPP'S TIRES

*Are cheaper at their cost than Iron ones gratis.
They will, without turning, entirely outwear the best Iron ones.
Wear uniformly, without flat places, or lamination.
Are not affected by extreme cold.
More than Forty Thousand of these Tires have been supplied.*

KRUPP'S AXLES

Possess similar advantages over iron ones that the Tires do.

THOS. PROSSER & SON, 28 Platt St., N.Y.

SOLE REPRESENTATIVES IN AMERICA.

HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

Carriage, Tire, Machine, Plow, & all kinds of

SCREW BOLTS,

Nos. 535 & 537 Central Avenue,
CINCINNATI.

BRIDGE BOLTS, Rivets of all sizes, Coach Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27, 1y

Philadelphia, Wilm'gton & Baltimore

RAILROAD!



FOUR PASSENGER TRAINS DAILY!

RAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11, P. M., Express.

On Sundays at 3.30, A. M., and 11, P. M.,
Leave Baltimore for the North and West daily, at 8.30; A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail, and 7.00 P. M., Express.

On Sundays at 7, P. M., only.
Through connections made for all points at the North, East and West.

WM. CRAWFORD, Agent.

KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

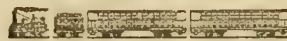
(Two Premiums awarded by Franklin Institute.)

T. F. RANDOLPH & BRO.

Mathematical Instrument Makers

No. 67 West 16th St. bet Walnut & Vine,
CINCINNATI O.

CHICAGO, GREAT WESTERN AND
NORTH-WESTERN LINE-INDIANA-
POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS.

CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—5:00 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—12:45 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M. Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—5:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent.

C. R. COTTON, Cincinnati

J. T. CRAPSEY,
ATTORNEY AT LAW,

—OFFICE—

N. W. Cor. Walnut & Sixth Street,
CINCINNATI.

KNICHT BROS. Consulting Engineers,

—AND—
COUNSELLORS
IN

PATENT CAUSES,

Solicitors of American and Foreign Patents.

Sprague's Bld'g.

OPP. POST OFFICE,

CINCINNATI, O.

W. M. F. HEWSON, STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and tax collections.

BUSH & LOBDELL, Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

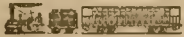
CELEBRATED WHEELS.

Either Single or Double Plate,
With or without Axles.

WHEELS FITTED

To Hammered or Rolled A
In the best Manner, at the Shortest Notice,
Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition.

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT

Will be more than sustained under the reorganization of its business.

In addition to the *Unequaled Attractions of Natural Scenery* heretofore conceded to this route, the recent *Troubles upon the Border* have associated numerous points on the road, between the Ohio River and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting WASHINGTON CITY en route*—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the **ONLY ROUTE** by which passengers can procure through tickets and through checks to **WASHINGTON CITY**

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Baltimore, O.
I. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

**NEW YORK, BOSTON,
AND ALL EASTERN CITIES,**

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6.

CHARLES MINOT, Gen'l Supt.

W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of

G. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

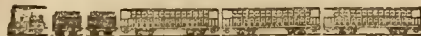
Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders are respectfully solicited, with the assurance that no one will be spared to give entire satisfaction.

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,

**THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.**

FROM PITTSBURGH TO NEW YORK
ONE TRAIN RUNS DAILY (430 MILES.)
VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.
ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburg with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
D. A. STEWART, Freight Agent, Pittsburgh.
CLARKE & CO., Transfer Agents, Pittsburgh.
R. C. MELDRUM & CO., Madison, Indiana.
J. E. MOORE, Louisville, Ky.
W. W. AIKMAN & CO., Evansville, Ind.
R. F. SASS, St. Louis, Missouri.
CLARKE & CO., Chicago, Illinois.
W. H. & E. L. LANGLEY, Gallipolis, Ohio.
G. B. NEAL, Parkersburg, Virginia.
HALL & CO., Marietta, Ohio.
H. S. PIERCE & CO., Zanesville, Ohio.
McDOWELL & McCORM, Portsmouth, Ohio.
R. MCNEELY, Maysville, Ky.
J. P. JOHNSTON, Ripley, Ohio.
JOHN TODD, Covington, Ky.
G. L. HEATON, Cleveland, Ohio.
R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.
L. L. HOUGHTON, Gen'l Ticket Agent, Philadelphia.
H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

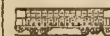
General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	9:20 P. M.
Mail and Express.....	8:30 A. M.	6:20 P. M.
Columbus Accommodation.....	4:00 P. M.	11:05 A. M.
Morrow Accommodation.....	8:00 P. M.	8:05 A. M.

Cincinnati Hamilton and Dayton RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	7:30 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	7:00 A. M.	11:40 P. M.
Cin. & Chicago Air-Line Ex.....	8:00 A. M.	8:50 P. M.
Dayton and Richmond.....	3:15 P. M.	1:30 P. M.
Day., Toledo & Detroit Huntsville.....	5:20 P. M.	10:55 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	8:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:50
Eastern Night Express.....	10:00 P. M.	7:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	5:00 A. M.	12:20 P. M.
Indianapolis and Terre Haute.....	5:00 A. M.	12:20 P. M.
Decatur, Springfield & Quincy.....	12:45 A. M.	4:45 P. M.
Chicago Night Express.....	5:00 P. M.	10:40 A. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.
For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	6:15 A. M.	10:00 P. M.
Louisville and St. Louis Night Ex.....	7:10 P. M.	7:20 A. M.

One through train for Louisville and St. Louis Sunday evenings.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

General Ticket Agent L. M. & C. & X., and C. H. & D Railroads.

General Ticket Agent Indianapolis & Cincinnati Railroad.

General Ticket Agent Ohio & Mississippi R.R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET

NEW YORK.

ALBERT BRIDGES.

JOHN

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.

Steel Wire and Whalebone Tube BRUSHES.
Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES
Glass Enameled Iron WATER PIPE
Wrought Iron STEAM PIPE.

THOS. PROSSER & SON,
48 Platt Street, N. Y.

N. W. BALDWIN, MATHEW BAIRD.
M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article appertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned
THEODORE DEHON,
no 1 10 Wal Broadway, New York

EDWIN J. HORNER,
SUCCESSOR TO

McDANIEL & HORNER,



**LOCOMOTIVE & RAILROAD
CAR SPRING
MANUFACTURER,
WILMINGTON, DELAWARE.**

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALLY ON BOTH SIDES, impossible to unravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

If Send or call for a circular, containing all particulars, prices, testimonials, etc.
fehl2. WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

—AND—

Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Spt. 2. MOSELEY & CO.

JAMES FOSTER, Jr. & CO.,
MATHEMATICAL AND PHILOSOPHICAL INSTRUMENT MAKERS,
S.W. CORNER FIFTH AND RACE,

Cincinnati, Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to;

H. TWITCHELL.

JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co. Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
Ag. 4.m.6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods

Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron is hammered. The whole operation from ore to finished Iron is conducted at our own Works
June 9.

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELIAS, President.
WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1½ to 10 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from ½ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas, Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—½ to 24 inches diameter, and branches for same, &c., &c.
Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER,
THOS. T. TASKER, JR., S. F. M. TASKER,
HY. G. MORRIS.

BUTLER'S

MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commercial.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroads for the South and West. For sale by 1,000 leading Merchants and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, JANUARY 22, 1863.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion.....	\$ 100
" " per month.....	3 00
" " six months.....	12 00
" " per annum.....	20 00
" column, single insertion.....	5 00
" " per month.....	10 00
" " six months.....	40 00
" " per annum.....	80 00
" page, single insertion.....	15 00
" " per month.....	25 00
" " six months.....	110 00
" " per annum.....	200 00

Cards not exceeding four lines, \$5.00 per annum.

THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	9.20 P. M.
Mail and Express.....	8.30 A. M.	6.20 P. M.
Columbus Accommodation.....	4.00 P. M.	11.05 A. M.
Morrow Accommodation.....	6.00 P. M.	8.05 A. M.

Cincinnati, Hamilton & Dayton—

Cin. & Chicago Air Line.....	8.00 A. M.	8.50 P. M.
Dayton & Sandusky.....	7.00 A. M.	6.45 P. M.
Dayton & Toledo.....	7.00 A. M.	11.40 P. M.
Richmond & Dayton.....	3.15 P. M.	1.30 P. M.

Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.55 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	8.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.50 A. M.
Eastern Night Express.....	10.00 P. M.	7.10 A. M.

Sandusky, Dayton & Cincinnati—		
Morning Express.....	7.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.55 A. M.

Marietta & Cincinnati—		
Mail.....	7.45 A. M.	5.75 P. M.
Accommodation.....	3.30 P. M.	9.55 A. M.

Ohio & Mississippi—		
Mail.....	6.15 A. M.	10.00 P. M.
Express.....	7.00 P. M.	7.10 A. M.

Indianapolis & Cincinnati—		
Mail.....	5.00 A. M.	12.20 A. M.
Chicago Express.....	5.00 P. M.	10.40 A. M.

Dayton & Michigan—		
Toledo, Detroit & Chicago Exp.....	7.00 A. M.	11.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.55 A. M.

Cincinnati & Chicago Air Line—		
Mail and Express.....	8.00 A. M.	8.50 P. M.
Night Express.....	7.00 P. M.	8.10 A. M.

Cincinnati, Wilmington and Zanesville—		
Morning Express.....	8.30 A. M.	6.45 P. M.
Accommodation.....	6.00 P. M.	8.20 A. M.

Kentucky Central— (City time.)		
First Train.....	6.45 A. M.	10.37 A. M.
Second Train.....	2.10 P. M.	6.30 P. M.

The trains on the Little Miami, Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

HUDSON RIVER RAILROAD.

In a recent issue we made some remarks on the impolicy of railroad companies making undue haste to pay dividends, especially those which have been unable to thoroughly complete their lines, and whose debts are so great as to seriously cripple their energies. A case of this kind has just occurred and we can not forbear to instance it for the common good. The Hudson River Railroad has had a year of unusual prosperity. Its gross earnings have amounted to \$2,626,712 78 against \$1,989,698 14 of last year. An increase of \$637,014 64 in one year. Such a temptation rarely occurs in the history of a railroad, and the directors of the road have declared a dividend of three per cent., payable in cash on February 10.

That we may illustrate this subject more fully, we will trace the history of the road for the past few years, commencing with the year 1853. The amount of stock authorized by the charter is \$4,000,000—of which, according to the Report of 1853, \$3,753,475 99 were subscribed, and \$3,740,515 99 were paid in. At the date of the same report, the total funded debt of the road was \$6,046,395, and the floating debt was \$956,590 42.

By the Report of September, 1861, the capital stock of the company subscribed was \$3,770,926 59, of which amount \$3,758,466 59 was paid in. There has, therefore, been an increase in the capital account of only \$17,950 60 during the past ten years. The following table will illustrate the course of the company as to funded and floating debt in this interval:

FUNDED AND FLOATING DEBT.

1853.....	\$8,344,439 26
1854.....	8,931,804 45
1855.....	9,350,362 84
1856.....	9,341,311 16
1857.....	9,295,315 51
1858.....	9,207,003 04
1859.....	9,256,654 35
1860.....	9,289,656 10
1861.....	9,910,411 27

It will thus be seen that there has been a steady increase of the liabilities of the road until, in 1861, they amounted to \$1,565,972 01 more than in 1853, when the road was supposed to be completed, an increase of about twenty per cent. in the liabilities of the company. In addition to which there were real estate mortgages to the amount of \$226,750—making in all nearly two million dollars of increase in the debt of the road on which interest has to be paid regularly and promptly.

The earnings of the company during this period have been as follows:

GROSS EARNINGS.

1853.....	\$1,247,632 28
1854.....	1,753,786 35
1855.....	1,812,087 00
1856.....	1,905,710 51
1857.....	1,802,825 00
1858.....	1,636,412 28
1859.....	1,842,436 19
1860.....	2,047,345 52
1861.....	1,949,013 74
1862.....	2,026,712 78

It will thus be seen that the earnings of 1862 were nearly \$600,000 greater than those

of the largest year in the previous history of the road. And it will also be seen that the company has no right to expect to earn on an average over \$2,000,000 per annum.

The operating expenses and payments for interest during the corresponding period have been as follows:

PAYMENTS.

	Operating Expenses.	Interest.
1853.....	\$ 918,253 17	\$462,795 08
1854.....	1,298,818 36	539,458 99
1855.....	1,208,411 00	
1856.....	1,239,573 01	651,314 87
1857.....	1,213,947 00	
1858.....	1,041,773 43	634,969 14
1859.....	1,078,540 60	647,700 47
1860.....	1,269,024 84	631,647 89
1861.....	1,422,552 82	655,547 99

As the road does not publish a report for the benefit of its stockholders or the public, we are unable to give the figures of these two items for the past year. The previous figures are obtained from the reports to the State.

Adding together the operating expenses and the payments for interest and the results for the ten years past will be seen to be as follows:

Surplus Earnings.

	Surplus Earnings.	Deficit.
1853.....		\$6,779 27
1854.....		84,291 00
1855.....		85,177 37
1856.....		40,330 29
1857.....	\$115,305 12	
1858.....	146,472 70	
1860.....		129,087 07

We have omitted the years 1855 and 1857, because we have not the exact amounts of the interest payments of those years, but their results would not materially change those of the years 1853, 1854, and 1856. It will thus be seen that the years 1859 and 1860 were the only ones which showed a surplus of earnings, and the aggregate surplus of those two years was \$261,867 91. In the year 1859 the increase of construction account was \$59,289 68. In 1860 it was \$412,165 86. While, during these two years, according to the reports, the Funded and Floating debts were reduced \$7,897 94. Here is an irreconcilable difference between the results of receipts and expenditures and reports, which can only be understood by adding the figures of the next year. In 1861, the construction account was increased \$249,154 45. The total increase of construction account for three years will thus be seen to be \$720,609 99. Adding to this the deficit of 1861, and deducting the surplus of 1859 and 1860, leaves a balance of expenditures of \$587,829 15. During the same years there was added to the debts of the road \$613,408 23. It will thus be seen that the surplus of 1859 and 1860 was just so much taken from the road-bed to be added to it in subsequent years, with a large increase. It is, therefore, plain that the Hudson River Railroad never earned a surplus previous to 1862. But on the contrary has alarmingly added to its debts from year to year. The gain of 1862, then, instead of being hurriedly declared as a dividend, would have been much better applied in reducing that alarming item called floating debt, which in 1861 was reported at \$773,411 27.

Under this state of things, the dividend that has been declared by the directors is so glaringly impolitic, that ill-natured people will be very apt to suppose it merely declared for the purpose of influencing the value of the stock in Wall Street. How such a course will please those of the stockholders who held their stock in good faith, as an investment, we think must be plain. The true course of the directors for the permanent interests of the road, was to use the unexpected and unprecedented surplus of 1862 in extinguishing the floating debt of the company, and relieving it from so dangerous an item. The legitimate result of the course now pursued on this road, will be the extinguishment of the stock interest in the road, and the property will fall into the hands of the bondholders. Such has been the case in other enterprises and such will be the case with this, if this policy is continued.

TERRE HAUTE & RICHMOND RAILROAD—PRESIDENT'S REPORT.

The business of the company during the year ending November 30 has been much larger than could have been expected at the commencement of the year. The results of the business can be seen by the statements appended to this report.

The existing war has made a heavy demand upon the resources of the company for the transportation of large bodies of troops, and munitions of war, to, and from, the capital of the State; and these requisitions have been met promptly and expeditiously, without accident, and without interfering materially with the regular traffic of the road. The heavy freight business has required the running of numerous extra trains at short notice, and the Superintendent in charge has successfully and skillfully managed this department of the business.

Early in the season it became apparent from the detention of cars at Indianapolis, that the rolling-stock of the line from St. Louis to Cleveland was insufficient to meet the heavy increase of freights, and arrangements were entered into by which each company agreed to furnish a certain number of cars of "compromise" gauge, proportionate to the length of each road represented. A contract was made with Barney, Parker & Co., of Dayton, for building thirty-two (32) compromise cars for this company, which have been delivered, and the cost of the same charged to surplus receipts. A contract was also made with the same firm, for building fifty (50) house cars of the gauge of this road, which have not yet been delivered; these, with what are building in the shops of the company at Terre Haute, will, it is thought, be sufficient for the wants of the road. The cost of the house cars to be delivered will be thirty-two thousand five hundred dollars.

As the rolling-stock was increased, the want of additional motive power was felt, and two

first-class locomotives were ordered from the Rogers Locomotive Works, to be delivered, one in January, the other in February, next; the cost of these engines will be about twenty-two thousand dollars.

The company has built during the year at its shops, to take the place of cars worn out in the service, one baggage, twenty-five house, and ten flat cars.

In July last, an opportunity offered to purchase a tract of land, containing seventy-nine acres, situated in Clay county, near the line of the road, and valuable to it for wood and timber. We purchased the tract for sixteen hundred dollars. We have also purchased for seven hundred and fifty dollars, a sufficient quantity of land to give the company permanent control of a spring, from which the water station at Coatsville derives its supply.

ROAD BED AND TRACK.—Two hundred (200) tons of iron rails have been purchased and laid in the track, and two hundred and fifty (250) tons have been re-rolled and re-laid. Additional sidings have been laid at Terre Haute, Reelsville and Indianapolis. Considerable expenditures will be required on the track during the year 1863.

BUILDINGS AND WATER STATIONS.—A new blacksmith shop has been built at Indianapolis, also a large and commodious wood house; one of the water stations at Greencastle has been rebuilt, and the blacksmith shop connected with the principal machine shop of the company, at Terre Haute, has been covered with a substantial slate roof.

MOTIVE POWER AND ROLLING STOCK.—The condition of the motive power and rolling stock will be seen by the report of the Master Machinist, appended to this report.

TELEGRAPH.—To facilitate the movements of the numerous trains, a more extended telegraphic system has been adopted, and three new offices opened—at Reelsville, Coatsville and Cartersburg. The benefit of this important auxiliary to the railroad in the running of trains, safely and expeditiously, has been fully shown by the operations of the past year. A second telegraph wire has been put up at the joint expense of the "Western Union Telegraph Company," and this company.

BRIDGES.—Under this head it becomes necessary to mention the falling of the bridge across the west fork of White Lick creek, tho' this accident occurred the day succeeding the close of the business year.

On Monday, December 1st, the "Howe Truss" bridge, over the west fork of White Lick creek, gave way while a freight train was passing, and a portion of the train fell with it, killing a brakeman, Isaac Pratt, and a stranger who was standing on the east abutment. The bridge had been well protected from the weather, and the timbers were all sound. Every precaution had been taken to guard against such an accident. A force was immediately set to work by the Superintendent to clear away the debris, and erect a tempo-

rary "trestle" bridge; on the succeeding Thursday night the train passed over. Arrangements are being made to replace the bridge with one of "Bollman's" Superior Iron Structures. The loss to the company by the falling of this bridge is estimated at about twenty thousand dollars, including the bridge, and property destroyed.

In the Vigo Circuit Court, we obtained judgments against the Terre Haute, Alton & St. Louis Railroad Company, as follows: On the 10th day of September, 1859, for sixty-nine thousand, seven hundred and eighty-eight dollars and eleven cents, (\$69,788 11,) and on fifteenth of same month, for nine thousand, one hundred and twenty-one dollars and sixty-nine cents, (\$9,121 69,) being amount of claims held against that company, with interest to date of judgment. By agreement with the St. Louis, Alton & Terre Haute Company, the said judgments, with interest to December 31, 1862, have been assigned to that company, and we have received from them their bonds of new issue, as follows:

Second Mortgage Preferred.....	\$57,000 00
" " Income.....	37,500 00
Scrip.....	52 50
Total.....	\$94,552 50

bearing interest at the rate of seven (7) per cent per annum, payable semi-annually, on the first days of May and November in each year.

The Court of Claims of the United States has decided that this company is entitled to the sum of seven thousand, five hundred and forty-three dollars and seventy-five cents, (\$7,543 75) for services rendered the Post-Office department in transporting the mails over the road in 1855 and '56, in addition to the mail matter provided for by contract with the company. A bill was reported at the last session of Congress, making an appropriation for the payment of this claim, and the Post-Office department awaits its passage to liquidate the amount. We have received from the Post-Office department the sum of eighteen hundred and twenty-five dollars, (\$1,825) due for mail service of the first quarter of 1856, but withheld by the department.

To many of the stockholders it is known, that from Indianapolis to Cincinnati there is no railroad that enters the latter city by its own track. The Indianapolis and Cincinnati Railroad terminates at Lawrenceburgh; from this point it uses, by means of a third rail, the track of the Ohio and Mississippi Railroad, and by contract with that company is prohibited from soliciting business from Cincinnati for points to which the Ohio and Mississippi Railroad is the direct line; thereby preventing a large amount of business from Cincinnati over the Terre Haute and Richmond Railroad and its connections. The Indianapolis and Cincinnati Railroad Company have taken measures through a company organized as the Cincinnati and Indiana Railroad Company, to build a road from Lawrenceburgh to

Cincinnati, a distance of twenty (20) miles, the new road to be leased permanently to, and operated by, the Indianapolis and Cincinnati Railroad Company. Viewing the building of this twenty miles of road to be of great importance to the Terre Haute and Richmond Railroad, we have loaned fifty thousand (50,000) dollars, to carry this into effect. This amount is secured to this company by the Indianapolis and Cincinnati Railroad Company, they paying interest at the rate of seven (7) per cent per annum, this company having the option to take seven (7) per cent bonds, to be issued by the Cincinnati and Indiana Railroad Company, should it so elect.

The officers and employees have discharged their several duties to the satisfaction of the Board.

The statements annexed show, in detail, the business of the company for the fiscal year ending November 30, 1862.

The gross revenue from transportation is.....\$563,314 15
Revenue from other sources..... 34,382 56

Total.....\$597,697 11
Expenditures.....\$246,335 17
June dividend of five (5) per cent on \$1,384,450 00..... 69,222 50
December dividend of seven (7) per cent on \$1,440,450 00, and Government Tax.....103,947 19 \$419,504 86
Surplus.....\$178,192 25

The capital stock has been increased by the surrender of fifty-nine, (59) seven per cent bonds of one (1,000) thousand dollars each making the capital stock, November 30, 1862:

28,809 shares of \$50 each.....\$1,440,450 00
Bonds outstanding at same date..... 171,000 00

The increase of revenue for transportation over the previous year is \$185,621 78.

OFFICERS.—E. J. Peck, *President*; Cha's Wood, *Secretary*; John Scott, *Treasurer*.

Directors.—Chauncey Rose, James Farrington, Demas Deming, Charles Wood, W. K. Edwards, F. Nippert, H. Ross, W. R. McKen, Terre Haute; E. J. Peck, Indianapolis.

MILWAUKEE SOUTHWESTERN R. R., WISCONSIN.—We notice a meeting of the principal business men in Milwaukee to consider the project of a Southwestern Railroad from Milwaukee to connect with the Racine and Mississippi Railroad at Burlington, the Kenosha and Rockford Railroad at Seneca, and the Elgin and State Line Railroad near Richmond. The speakers explained the objects of the road and its advantages to Milwaukee, and the matter was favorably considered by the meeting.

MISSISSIPPI AND MISSOURI RIVER R. R.—This road is expected to be completed and running to Grinnell by March next. Trains are now running fifty miles west of Iowa city, and the track is completed and iron sufficient on the ground for the next section of twenty miles to Grinnell. Iowa is showing herself a giant in railroad enterprises, and deserves the prosperity which must follow the completion of these great works of improvement.

DAYTON AND MICHIGAN R. R.

We are in receipt of the Annual Report of this Company for the year ending March 31, 1862. And although rather late we give it on the principle that it is better late than never. We trust to be favored with it earlier next year. The President says:

The gross earnings of the road for the last fiscal year have been as follows:

From Passengers.....\$137,203 03
" Freight..... 225 618 44
" Mail and Express..... 37,346 90
Total.....\$400,168 37

The operating expenses and taxes amount to \$177,217 53—making the net earnings amount to \$222,950 84, and showing the cost of operating and maintaining the road to have been 44½ per cent. of the gross earnings.

Inasmuch as the year just closed has been the second one of the full operation of the road, and viewing the disturbed condition of the country, we have no reason to be dissatisfied with the year's business. A very large proportion of our freight was in one direction, viz., eastward bound. The westward bound business was comparatively small, owing to a complete stagnation of manufacturing, building and other business at Cincinnati, and along the southern end of our line, and to the almost total interruption of trade along the Ohio and Mississippi rivers; and as the same condition of things appears likely to continue for some time, we must look for our business in the same direction.

Owing to the very great amount of produce now to be carried forward, the earnings of the Dayton and Michigan Railroad may be considered as limited only by the capacity of the equipments that can for the time being be brought into use on the line between Cincinnati and Toledo.

As proposed in our Last Annual Report, we have succeeded with a majority of the First Mortgage bondholders, to defer the payment of the interest from July 1, 1861, to January 1, 1864—thus enabling us to pay the construction debt, and the Company to become the owner of the machinery and the rolling stock on the road.

We have also consummated the purchase of depot grounds at Toledo, and erected the necessary buildings and improvements thereon, which enables us to do a much larger business than heretofore.

The Treasurer gives the following statement of the finances of the Company:

I have charged up to the Construction Account the past year the following items, viz:

Discount on 46,000 second mortgage bonds sold.....\$8,900 00
Bonds ordered to be paid to estate of H. Doolittle, by decree of Court in settlement.....\$5,000 00
Stock issued to estate of H. Doolittle..... 4,261 64
Additional improvements made to Lima machine shops, including iron house, reservoir, and balance due Lloyd and Chipperger on contract.... 2,529 68
Increased cost of Piqua connection..... 197 97
Additional side tracks, etc..... 1,247 54
Making total amount—per balance sheet....\$22,136 23

The increase of the Toledo Depot account, is caused by additional purchase of real estate, paid for as follows, viz:

In Bills payable, secured by mortgage.....\$ 4,570 00
In Bonds payable March 1st, 1881, with seven per centum interest, payable in the city of New York, semi-annually, secured by a mortgage on the property at par value..... 56,000 00
Due to individuals to be paid in bonds when their title is perfected..... 11,470 00

Also expended on improvements.....\$72,040 00
\$26,859 91

Making the entire cost of the Toledo Depot grounds up to this time.....\$100,910 91

There has been charged to new Rolling Stock, two baggage cars, purchased of Whitaker & Phillips.....\$1,350 00
One second hand baggage car, purchased of the Cincinnati Hamilton & Dayton R. R. Co..... 300 00

(This car came on to the road in April, 1858, and was worn out in the service of the Company, but was not settled for until the last year.)

24 box and stock cars..... 10,950 00
The expenses of changing twenty flat cars to stock cars..... 1,000 00
Material on hand and new cars in shop in process of construction..... 1,142 80

Making total amount charged to new rolling stock account.....\$14,742 80

In order to show the present condition of the Capital Stock of the Company, when all of it is reissued and the interest included therein, I have computed the interest on the old issue, still outstanding, up to the time the road was completed, September 1, 1859, and brought it into this account showing, viz:

Capital Stock, new issue.....\$1,795,249 86
" old issue..... 462,638 75
Estimated interest due on same, September 1, 1859..... 172,858 00
Capital Stock paid in and not issued..... 18,218 66
\$2,448,965 27

Making two million, five hundred thousand dollars, the probable amount of the capital stock of this Company.

There was other subscriptions to the stock beyond the amount included in the foregoing statement. The parties who subscribed, however, dispute their liability upon their subscriptions, and in some instances suits have been commenced by the Company to enforce the collection. If the Company succeeds in enforcing its claims, the stock will be increased, but the assets will also be increased to a corresponding amount by the collections.

The "Bills Payable" shows amount still due to be.....\$221,784 94
They should be divided into four classes, as follows, viz:

1st. Notes given for construction of the road without any security.....\$56,037 98
2d. Notes given for iron and machinery, secured by mort. bonds, as collateral..... 139,456 37
3d. Notes given for depot purposes, secured by real estate..... 9,466 63
4th. Notes given for supplies..... 16,823 96
\$221,784 94

A large amount of the rolling stock now on the Line and in use by the Company, is owned by A. Gross & Co. Before the Company can become the owner of this part of the rolling stock, there must be paid to a Gross & Co. the sum of \$146,440 58, not included in the foregoing statement of indebtedness.

Notwithstanding the large cash expenditure at Toledo for depot grounds, we have

been able to show a decrease in bills payable and call loans, of \$126,647 07.

If payment of this indebtedness is made in the same ratio as last year, it will require only sixteen months to relieve the Company of its entire secured floating debt, and its debt for current supplies; but the large increase of business encourages us to believe, that at our next meeting, this part of the debt will be paid in full.

The number of second mortgage bonds sold during the year was forty-six, of \$1,000 each, at an average price of more than eighty per cent. on their par value, the proceeds of which with the surplus earnings of the year, and also the proceeds of call loans and bills receivable, were applied to the reduction of the notes given for iron, construction, rolling stock debt and bills discounted, and also in reducing the amount of notes given for supplies.

It will be observed, that we owe notes to the M. S. & N. I. R. R. Co., amounting to \$14,325 34. These notes were given in payment for use of their depot, tracks, etc., at Toledo, in accordance with the terms of a contract made with them to that effect. The original amount of the notes was \$17,325 34, but \$3,000 00 of that amount was paid before the close of the year. The balance is all payable during the present fiscal year.

The results of operation as shown in the Superintendent's Report, are as follows:

The earnings for the first four months of the year, were—because of the paralyzed state of the country—exceedingly small. The remainder of the year, however, shows a material increase, so that the result of the whole year is quite satisfactory.

The gross earnings for the current year from all sources were \$400,168 37.

The operating expenses, including taxes for same time, were \$177,217 53, leaving \$222,950 84 as net earnings for the year; and showing the expenses of operating and maintaining the road, including taxes, to have been 44½ per cent. of the gross earnings.

There must be deducted from the above net revenues, the sum of \$4,650 00 for rents paid the Cleveland and Toledo Railroad Co., for the use of the bridge over the Maumee River at Toledo, and \$5,800 00 paid the Michigan Southern and Northern Indiana R. R. Co., for the rent of depot, which leaves \$212,500 84, the net revenues of the road, for the fiscal year, applicable to the payment of interest on bonds, and the reduction of the debt created in the construction and equipment of the road.

Of the gross earnings 62½ per centage was from the local business of the line.

The receipts of the road for the last year have been much less than they would have been but for the unsettled condition of the country. Because of the limited rolling stock

and entire want of facilities for handling grain at Toledo, during the autumn of 1861, large amounts of grain were diverted from the road to the canal, and other lines of transportation.

The freights south also in common with all other roads, have been exceedingly light—in tonnage not to exceed twenty-five per cent. as compared to freights in same direction the year previous to the war.

This deficiency is attributable to the stopping of the trade on the Mississippi river, and the paralyzing effects of the war on all southern bound traffic.

These circumstances combined to keep the earnings much below what they would otherwise have been.

The grading, laying the tracks, and building the docks and freight house on the new freight depot grounds at the Bayou near the Oliver House in the city of Toledo, were so far advanced as to permit their use on the first day of December, 1861, and on that day the Company commenced to do the freight business of the Toledo terminus at the new station.

The improvements of the docks are not all completed, but the work is progressing with a view to having them all finished during this summer.

The importance and advantage of this depot to the future business of the road, can not be over estimated. It gives over eighteen hundred feet of good wharf on the Bayou, affording ample accommodations for all its business, including that with Lake Erie, as well as the transfers with other roads, and the local trade with the city of Toledo.

The amount expended on the improvements at Toledo up to the close of the fiscal year, was \$26,616 26.

The general improvement of the country, the increased number of grain houses, the improved depot and shipping facilities at Toledo, and the prospects of the resumption of southern trade, gives us just cause to look for a large increase of earnings during the ensuing year.

The earnings of the road for the months of April, May, June, and July, 1862, were.....\$161,885 90

For same months in 1861.....104,952 04

Which shows an increase of.....\$56,933 86

for the first four months of this fiscal year over the corresponding months of the year just closed.

Though, for causes assigned, the earnings of the road for the second year of its working, have been much less than they otherwise would have been, yet they have exceeded by \$15,000 00 the estimate made by the undersigned in 1856, as the probable earnings of the road for the second year.

The cost of working and maintaining the road and equipments, including the taxes, shows an increase of \$14,322 41 over the cost of operating the road for the previous year.

Total expenses for the year ending March 31, 1862.....\$177,217 53

Total expenses for the year ending March 31, 1861.....162,895 12

Increase.....\$14,322 41

The business of the road during the year has been conducted with efficiency, and with all the economy consistent with safety and dispatch.

The roadbed and track have been maintained in good order. Two hundred tons of new rails were purchased and used in the main track between Dayton and Troy, replacing defective rails, which have been mostly used in side tracks.

There have been used also during the year 14,295 new cross ties, to replace those that were defective and found unfit to remain in the track.

The bridge over the Great Miami River at Troy was rebuilt during the summer of 1861, and all defective timbers found in other and smaller bridges have been replaced with new timbers. All the bridges on the line are in safe and reliable condition.

There have been added to the rolling stock during the year nineteen new box cars, and three stock cars. There have been eighteen flat cars changed to stock cars.

The rolling stock on the road now consists of the following:

16 Locomotive Engines.
141 Box Freight Cars.
55 Stock or Cattle Cars.
10 Flat Cars.
9 Passenger Cars.
5 Baggage " "
65 Gravel " "
31 Hand " "

All of which are in good order and condition.

The number of miles run by engines during the year was.....365,470

For year previous.....347,356

Increase.....18,114

The cost of repairs of engines for the year just closed has been.....\$15,827 21

Same for previous year.....14,903 32

Increase.....\$1,917 89

The cost of repairs of engines per mile run was.....4½ cen

Same for previous year.....4 "

Increase.....½ "

The number of miles run by freight cars during the year was.....1,688,452

Same for previous year.....1,503,255

Increase.....185,197

The cost of repairs of freight cars for the year was.....\$12,267 56

Same for previous year.....8,611 51

Increase.....\$3,726 05

The cost of repairs of freight cars per mile run was.....8.10 cts.

Same for previous year.....6.10 cts.

Increase.....2.10 cts.

The number of miles run by passenger cars for the year was.....478,996

Same for previous year.....456,144

Increase.....22,852

The cost of repairs of passenger cars during the year was.....\$3,776 86

Same for previous year.....5,335 69

Decrease.....\$1,549 83

There was purchased during the year.....13,164 cords wood

Same for previous year.....13,432 "

Decrease.....268 "

There was paid for wood during the year.....\$19,666 13

Same for previous year.....16,261 61

Increase.....\$3,404 52

There was on the line at the end of the year just closed.....9,606 cords.

The end of previous year.....12,241 "

There was consumed during the year 15,600 cords of wood, equal to fifty cords per day, or an average of one cord to each twenty-three and one-half miles run by an engine.

The shops at Lima are all now finished and in complete order. There is a carpenter shop 60x160 feet; machine shop of same size; smith shop 40x50 feet; shop for mending rails, and engine stable, all of which are supplied with the most approved machinery, convenient and well arranged.

Within the year there has been constructed at Lima a reservoir that gives an ample supply of soft water for the locomotives and stationary engines.

These shops give the company ample facilities for all repairs of engines and cars, and also enables them to build, at first cost, new cars, as demanded by the increased business of the road.

Our policy has been to conciliate and maintain friendly relations with all of our connecting lines, and thus far success in that respect has attended our efforts.

FINANCES OF INDIANA.

Governor Morton, in his Annual Message, gives the following statement of the financial condition of this State:

The indebtedness of the State up to the first day of January, 1863, has been increased by the war as follows:

Due on War Bonds.....	\$1,925,500 00
Due on Military Claims.....	146,279 87
Increase.....	\$1,371,779 87

The entire public debt of the State stands as follows:

Five per cent. stock growing out of adjustment with creditors in 1846.....	\$3,325,500 00
Two and a half per cent. stocks having the same origin.....	2,058,173 50
War debt as above stated.....	1,371,779 87
In all.....	\$6,745,453 37

This statement, however, does not include three hundred and ninety-one Internal Improvement Bonds of \$1,000 each, said to be outstanding, the holders of which failed to comply with the adjustments made in 1846.

GENERAL RECEIPTS AND EXPENDITURES.

The following statement exhibits the receipts and expenditures by the Treasury during the fiscal year ending October 31, 1861 and 1862, as shown by the reports of the Auditor of State:

Balance in Treasury Nov. 1, 1860.....	\$ 144,660 30
Receipts for year ending Oct. 31, 1861.....	2,669,264 93
Disbursements for year ending Oct. 31, 1861.....	3,542,510 57

Balance in Treasury Nov. 1, 1861.....	\$ 361,414 75
Receipts for year ending Oct. 31, 1862.....	\$3,486,304 55
Disbursements for year ending Oct. 31, 1862.....	2,974,976 46

Balance in Treasury Nov. 1, 1862.....	\$ 876,474 42
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NEW YORK—ITS PUBLIC DEBT.

The following is the statement of the Funded Debt of this State, as given by the Governor in his Annual Message:

The funded debt on the 30th of September last, stood as follows:

Of Canal Debt.....	\$23,981,610 25
Of General Fund Debt.....	6,305,364 37
Total State Debt.....	\$30,487,264 62

By abstaining from further borrowing and by depositing the usual annual contributions to the credit of the Sinking Funds, the Controller estimates that the above debt will be substantially extinguished within twelve years.

Balance in the Treasury, including Canal Fund, Oct. 1, 1861.....	\$3,074,941 85
Receipts from all sources during the fiscal year ending with Sept. 30, 1862.....	20,840,913 20

Total.....	\$23,915,855 05
Payments during the same period.....	18,165,233 86

Balance in Treasury Oct. 1, 1862.....	5,760,621 19
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CANAL FUND.

Balance in the Treasury to the credit of the Canal Fund Sept. 30, 1861.....	2,604,621 25
Received during the fiscal year from Canal tolls, rents of surplus waters, and interest on revenues.....	\$4,854,969 67
From proceeds of taxes.....	2,769,623 09
From other sources.....	168,831 61

Total.....	\$10,398,115 62
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Payments during the same periods:

For redemption of Stocks.....	\$2,120,000 00
For interest on Stocks.....	1,429,859 36
To Canal commissioners, repair contractors, superintendents, collectors and weighmasters.....	1,758,621 33
Miscellaneous.....	509,331 10
	5,809,811 79

Leaving balance to the credit of the Canal Fund on the 30th Sept., 1862, of.....	\$4,589,303 83
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The gross receipts from tolls, for the past season of navigation, was about \$5,180,000. But this sum represents only the amounts paid into the public Treasury for the use of the canals. Our citizens, who are the carriers between the lakes and the city of New York, as well as those engaged in transportation upon our inland waters, and upon the ocean, derive a still greater advantage from our commerce with the West. The vast extent of our internal carrying trade can be stated only approximately, but may be safely put down at the following figures for the past year:

Estimated tonnage of Canals for 1862.....	4,900,000 tons.
Ascertained tonnage of Railroads to September 30.....	6,600,000 tons.

For a single year.....	11,500,000 tons.
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Estimated value of property carried on the Canals for 1862.....	\$141,000,000
On the railroads in 1862.....	159,000,000

For a single year.....	\$300,000,000
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It may be added that seventy per cent. of the values of railroad and eighty per cent. of canal freights are moved from West to East. These facts should induce us to give every possible facility to the vast and growing commerce of the Western States, mainly dependent upon them as we are for the immense through traffic which constitutes so large a share of our carrying trade, and forms a most important source of our commercial greatness, affording at the same time one of the many reasons for cultivating the most enduring relationships with that section.

The obstructions in the channel of the Hudson river severely impair the usefulness of our Canals. Their increased capacity has led to the building of boats of greater draft than formerly. These are towed through to New York without change of freight, and after the spring freshets it is not unusual for them to get aground in the river, after passing through the canals without difficulty. Suitable measures should at once be taken for the removal of these obstacles.

The aggregate valuation of real and personal property of the State for 1862 is \$1,449,303,948. This exceeds the previous year by \$7,536,515, although the valuations in the cities of New York and Brooklyn were reduced about fifty million dollars.

The State tax of last year was at the rate of 4½ mills on each dollar of the taxable property. According to the estimates of the Controller, less than one-half of that rate will be sufficient for the present year, unless some extraordinary appropriations shall be made by the Legislature.

WINONA AND ST. PETER R. R., MINNESOTA.

This road, formerly known as the Transit Railroad, has just celebrated the completion of eleven miles from Winona to Stockton. We condense the following history of the road from the *Winona Republican*:

The Transit Railroad, as it was formerly called, now known by the more distinctive name of the Winona and St. Peter Railroad, has always been a cherished enterprise of the citizens of Winona. From the first settlement of the town, almost, until the present hour, they—at least the active leading portion of them—have devoted time and means to the promotion of this enterprise, with a liberality and persistence which but few communities similarly situated would have had either the heart or the foresight to do. There was the first organization of the Transit Company, in the winter of 1855, by a party of our own citizens, and the passage of the bill through the Legislature for that purpose. Then followed the protracted struggle at Washington to secure the Congressional Land Grant in which Winona finally succeeded in carrying off the prize, making this place the eastern terminus of the only east and west trunk railroad projected in the State. Subsequently arose the various contests in the Legislature as to whom the Land Grants should be given, and here, also, fortune favored us. After these came the politico-financial scheme of the State Railroad Bonds, which ended so disastrously, as many have excellent reasons for remembering. Almost universal hopelessness and distrust were the natural consequences, and for a period the man who still entertained the idea of building a railroad in Minnesota during the first half of the present decade was considered quite as "airy" in his way as the repudiated State Railroad Bonds themselves.

Amid the general despondency, however, there was some who held to the ancient faith that the Transit Railroad could and would be built. Among these was Col. DE GRAFF, who had been the contractor for building, and was now the principal interested party in the road.

At the last session of the Legislature a bill was passed transferring all the rights, privileges, property and franchises of the Transit Railroad to a new Company, designated as the Winona and St. Peter Company. In this bill it was stipulated that "the Company shall complete the construction and equipment of ten miles of the said road, commencing at Winona, so that the same shall be ready for business by the first of January, 1863." The times, as every one knows, have been very inauspicious for railroad enterprises all over the country, but more especially so in the West. We need not enumerate, the difficulties which have been met and overcome, during the year, by the Company. Suffice it to say the requirements of the charter granted have thus far been met, and eleven miles of road have actually been constructed and equipped, ready for business.

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	R. to of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	100	48	\$ 13,111,800	\$ 10,781,833	\$ 566,07	\$ 3,022,203	\$ 2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5		1885	
Baltimore and Ohio.....	Md.		320							"	2,500,000	6	100	1885	
do do										"	700,000	6		1880	
do do										"	1,124,500	6	102	1875	
do do										"	1,000,000	6	103	1867	
do Washington Branch.....	Md.		30	1,650,000						"	160,000	7		1870	
Bellefontaine and Indiana.....	Ohio & Ind	118		1,859,813	1,256,750	139,139	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7	55	1865	
do do										2d "					
Buffalo and State Line.....	N.Y. & Pa.	60	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
Burlington and Missouri.....	Mo.		75	1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	138	96	3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	347,000	6	100	1864	
Central Ohio.....	Ohio.		137	In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	450,000	7		1861	
do do										1st "	800,000	7		1864	
do do										2d "	800,000	7	76	1865	
do do										3d " S. F.	950,000	7		1885	
do do										4th " S. F.	1,363,800	7		1876	
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d "	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	85	222	In hands of Receiver.	6,168,320	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d "	1,535,000	7			
do do										3d "	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report received.						1st Mortgage.....	400,000				
do do										2d "	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.		104	2,897,756	7,335,403	50,386	720,705	230,119	Apr. 1, 1861.	1st Mort. S. F. Gen'l 1st Mortgage.	1,250,000	7	104	Feb. & Aug.	
do do										2d "	3,600,000	7	693	Feb. & Aug.	
do do										2d "	2,000,000	6	41	May 1.	
Chicago and Rock Island.....	Ills.	95	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	105	1870	
Chicago, Burlington and Quincy.....	"	165	138	4,669,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	125	1883	
do do										" 2d " S. F.	813,000	8	118	1890	
do do										1st Mort. Chi. & Aur.	399,000	7		1867	
do do										2d "	303,000	7		1869	
do do										1st " Cent. Mil. Tract	392,000	7		1864	
do do										2d "	245,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	105	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	950,000	7	100	1880	
Cincinnati, Wilmington & Zanesville ..	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d "	532,000				
do do										3d "	104,000				
do do										Income.....	265,500				
Cleveland and Mahoning	Ohio.		68	1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d "	469,000	7			
do do										3d "	344,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	69	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	106	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7	102	1873	
do do										3d 2d Ex.	1,165,000	7	100	1865	
do do										4th 3d Ex.	1,154,000	7	81		
Cleveland and Toledo.....	Ohio.	95	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mort. Jun. 1st Div.	359,000	7	103	1867	
do do										1st "	263,000	7		1872	
do do										2d "	265,000	7		1862	
do do										1st " Tol. Nor. & Cleve	521,000	7		1863	
do do										2d "	293,300	7		1864	
do do										Junction Income..	44,500	7		1862	
do do										C. & T. Income..	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	170	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	170	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	584,000	7	106	1861	
do do										2d "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	115	54	1,490,000	290,700	50,500	See L. Miami.			Dividend.....	272,700		100	1860 to 1866	
Columbus, Piqua and Indiana.....	"		103	In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"		142	2,176,666						2d "	2,212,000	8			
Dayton and Western.....	Ohio.		38	307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	50		
Detroit and Milwaukee.....	Mich.		186	No report						1st Mortgage.....	2,500,000	7	90	1875	
do do										2d "	1,000,900	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.		111	No report											
Dubuque, Marion and Western.....	Ohio.		36	469,762	728,853	152,694	152,328			1st Mortgage.....	737,734				
Eaton and Hamilton.....	Ind.		132	986,061	1,219,100	249,863	124,140	43,865	Dec. 31, 1860.						
Evansville and Crawfordsville.....	Wis.			Operated by Galena & Chicago Union.											
Fox River Valley.....										1st Mortgage.....	400,000				
Galena and Chicago Union.....	Ills.		121	6,028,300	3,524,200	none	1,462,732	652,260	Dec. 31, 1860.	2d "	180,000				
do do										1st Mortgage.....	1,993,000		104	1862 & 1863	
do do										2d "	1,520,000		100	May 1, 1875	
Great Western.....	Ills.		175	1,600,000	2,391,000		455,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.		84	400,000	No report										
Greenville and Miami.....	Ohio.		32	300,000	473,000	75,000	63,141	13,573							
Hannibal and St. Joseph.....	Mo.		206	1,041,086	10,554,000	220,356	996,907	512,933	Sept. 1, 1860.	Land Mortgage...	5,000,000				
do do										Mortgage Conv.....	1,354,000		63		
Hartford and New Haven.....	Conn.		62	2,350,000	927,000	13,356	354,136	354,136	Aug. 31, 1861	1st Mortgage.....	927,000	6		1873	
Hudson River.....	N. Y.	95	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	118	1869 & 1870	
do do										2d S. F.	2,000,000	7	114	1870	
do do										3d "	1,840,000	7	101	1875	
Illinois Central.....	Ills.	94	455	15,054,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	28,000	7	121	1868	
do do										Construction.....	12,885,000	7	115	1875	
do do											4,115,000	6	100	1875	
do do										Debentures.....	42,740	7	100		
Indiana Central.....	Ind.		72	611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000	7			
do do										2d "	578,000	10			
do do										Income.....	38,700	10			
Indianapolis and Cincinnati.....	Ind.		110	1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000	7		1866	
do do										2d "	400,000	7	90		
do do										Real Estate Mort...	200,000	7	90		
Indianapolis Pittsburgh and Cleveland	Ohio.		84	835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	1st Mortgage.....	649,984				
do do										2d "	314,000				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report								
do do	Ohio.		13	118,863	50,000		No report								

THE BALTIMORE & OHIO R. R.—*Letter from John Durand, Superintendent of the Marietta R. R.*

EDS. COM.: I beg to be permitted to direct public attention to that great Eastern thoroughfare, the Baltimore and Ohio Railroad, the benefits of which the commercial community have, for many months, been deprived.

Owing to the unprecedented demand for transportation to Eastern cities having greatly overtaxed the facilities of all other Eastern lines, the opening of the Baltimore and Ohio Railroad has been regarded an exigency, and the aid of the General Government has been invoked to protect the line, that it might extend relief to the pressing wants of the West and Northwest. The road but recently, as a whole, came into the possession of the company, and with efforts which, in proportions and results, have scarcely a parallel in the history of railway construction, under the auspices and protection of the government, as a public necessity, it has been made available, and, despite the trouble with which it has so long been invested, its organization is excellent, its management prompt, and its equipment immense. But quite to the astonishment of all who are acquainted with existing facts, the public mind seems filled with apprehensions of danger, both to persons and property, while in transit over the route.

To attempt to disabuse the minds of our commercial men, in this regard, is the object of this communication.

I am convinced that the route is now entitled to the fullest confidence, and that property entrusted to it will be forwarded with entire safety and great dispatch.

In addition to the protection afforded by a thorough military organization and an effective military force, which alone will secure safety and dispatch, the Baltimore and Ohio Railroad Company, by special clause in bills of lading, guarantee shippers against loss by military seizures, or damage by the public enemy, and no one will question the ability of that company to fully protect all contracts made by its authorized agents.

A recent letter from the Hon. W. P. Cutler, Member of Congress, and Vice-President of the M. & C. R. R. Co., gives assurance, drawn from high authority, that a very powerful military force has been detailed for the protection of the Baltimore and Ohio Railroad, and that we can send forward freight with confidence.

In corroboration of the foregoing, I have received the following telegram from Parkersburg, from an officer of the B. & O. R. R. who had just arrived there:

"I found one hundred and fifty cars here, and more are coming, but we have nothing to put in them. Have you no freight for us? Don't allow any fears for the safety of the road to prevent business. I can assure you the road has never been safer since the commencement of the war than now, and both armies moving toward Richmond freeing us entirely from danger.

(Signed) "W. P. Smith,
"Master of Transportation."

Under these circumstances I feel at liberty to appeal to shippers, on behalf of the Marietta & Cincinnati and Baltimore & Ohio Railroad Line, for a liberal share of their patronage, assuring them that a large equipment is at their command, that every possible effort will be made to meet their requirements, and the testimony on all hands indicates that fears of delay or loss are quite groundless.

Respectfully,

J. DURAND,
Superintendent M. & C. Railroad.

HUNT'S MERCHANTS' MAGAZINE FOR JANUARY.—The January Number of this excellent statistical Journal contains articles on the Sugar Cane, Beet Root, and Sorghum. A uniform National currency, the currency, the Atlantic Telegraph and the western coast of Ireland, enlargement of the Illinois and Michigan Canal, Mariners' Compass and Iron Ships, Distillation of Petroleum, a Commercial Chronicle and review of current events in the monetary and financial world, statistics of Trade and Commerce. A Journal of Banking, Currency and Finance and other very interesting statistics.

The present is the first Number of Vol; 48. The subscription price is \$5.00 per annum, address WM. B. DANA, 61 and 93 William St., New York.

CEDAR RAPIDS AND MISSOURI RIVER R. R.—This road is now nearly completed to Marshalltown the county seat of Marshall county, Iowa. This will bring the road to the western verge of the Des Moines Valley, and will undoubtedly add greatly to the business of the portion of the road already completed.

MONETARY & COMMERCIAL.

At the date of our last writing monetary and financial circles were in the most violent ferment that it has ever been our province to record. Speculation ran wild in its mad endeavor to buy something—anything, no matter what. The long lists of the New York exchange were swelled to three times their largest size, and every one was speculating at the Board. Such a harvest for lucky holders as never was known before—to be followed at some future day by such a reverse as will be frightful when it comes. The past week has been a more quiet one. It has become certain that Secretary Chase will carry the main features of his plan and will not vacate the Treasuryship, and hence such broken down politicians as Robert J. Walker need not trouble themselves about the succession. With this point settled, a stop has been put to the rapid rise of gold, and it remains nearly where we left it at our last quotations. Exchange has been in better demand, but quotations are not materially changed. We quote rates as follows:

	BUYING.	SELLING.
New York.....	1-5@1/2 dis.	par.
Philadelphia.....	1-5@1/2 "	par.
Boston.....	1-5@1/2 "	par.
Gold.....	43@45 prem.	46@50 prem.
Silver.....	30 "	.....
Demand Notes.....	40@42 "	.....

The weather for the past week has been unfavorable to general business. The snow, which was falling briskly at our last writing proved to be the heaviest fall that has been experienced for at least fifteen years. The total fall in this vicinity was from twenty to twenty-four inches. The railroads being totally unprepared for any such a fall were blocked up, and their business entirely stopped. The

snow was immediately followed by a rain and thaw, we may now expect a flood. The dry-goods business has been moderate and but for the interruption of the railroads would have been brisk. Country dealers are disposed to buy early, fearing further advance in prices. Quotations follow the New York markets very closely. Groceries have been dull during the week. Holders, from a feeling of uncertainty as to prices, prefer holding to selling, and are rather above the current rates.

Flour has advanced slightly. We quote superfine at \$5 50@5 60. Family \$5 75@5 80. Fancy \$6 00@6 25. Wheat \$1 12@1 15 for prime red. \$1 15@1 18 for Indiana and Ohio white, and \$1 20 for prime Kentucky white. Corn shelled is quoted at 46c in bulk, and 58c sacked. Rye 70c in sacks. Barley \$1 15@1 20 for spring; \$1 30@1 35 for fall. Whisky 41c.

Owing to the weather the receipts of hogs for the week have been light, and prices have consequently been better. They range from \$4 65@5 00, according to weight. New mess pork has sold largely for \$13 00. Old commands \$11 00, and some lots have brought \$11 25.

The earnings of the Chicago and North-Western Railway for the month of December show a very large increase. They were:

Passengers.....	\$31,626 86
Freight.....	57,603 28
Mails.....	1,695 88
Express.....	827 50
Miscellaneous.....	50 00
Total.....	\$91,863 47
December, 1861.....	55,035 22
Increase.....	\$36,828 25

The following are the earnings of the Cleveland and Toledo Railroad Company for the month of December:

1862.....	\$160,719
1861.....	165,253
Increase.....	\$5,457

Earnings for first week in January:

1863.....	\$31,484
1862.....	20,067
Increase.....	\$11,417

The following are the earnings of the Cleveland and Pittsburgh Railroad for December, 1862:

1862.....	\$137,563 27
1861.....	107,174 81
Increase.....	\$30,388 46

The receipts of the Harlem Road for the month of December are as follows:

1861.....	\$ 90,090 67
1862.....	123,713 27
Increase.....	\$33,642 59

The earnings of the Illinois Central Road for the first week in January were:

1862.....	\$43,627 74
1863.....	51,075 95
Increase.....	\$7,448 01

The month of December on the Illinois Central will show an increase of over one hundred thousand on the same month of the previous year.

The following are the earnings of the Hudson River Railroad Company for December:

1862.....	\$403,571 40
1861.....	246,282 92

Increase.....\$157,288 42

The Rock Island Railroad earned in December:

1861.....	\$107,839
1862.....	134,322

Increase.....\$26,623

of which \$4,982 was on the last week.

The Galena and Chicago Railroad earned in December:

1861.....	\$122,308
1862.....	153,406

Increase.....\$21,188

of which \$4,454 was in the last week.

MICHIGAN SOUTHERN RAILROAD.—The Michigan Southern road earned in December:

1861.....	\$189,076 00	1862.....	\$279,530 00
Increase.....			\$90,463 00

Of which \$20,000 was from soldiers' fare.

The total valuation of property in the State of New York in 1862 was \$1,419,303,948, on which the State Tax was \$5,797,215 79.

The Chicago and Alton Railroad Company earned for the week ending Jan. 7, 1863:

	1862.	1863.
Passengers.....	\$8,066 00	\$5,673 62
Freight.....	8,188 25	9,033 61
Sundries.....	874 33	315 33

Total.....\$17,129 18

Increase in 1863.....1,576 62

Total this month to date.....\$17,129 18

Total since Jan. 1.....17,129 18

The receipts of the New York and Harlem Railroad Company for the year 1862, as compared with the previous year, are as follows:

	1861.	1862.
January.....	\$100,922	\$103,494
February.....	88,201	96,939
March.....	88,790	103,020
April.....	94,630	34,957
May.....	83,856	94,150
June.....	88,605	97,317
July.....	92,802	101,857
August.....	91,958	113,223
September.....	89,356	99,435
October.....	97,857	107,692
November.....	91,110	99,135
December.....	90,674	125,715

Total.....\$1,098,657

Increase for 1862 over the previous year.....\$127,702

The Milwaukee and Prairie du Chien Railroad earned in December:

1861.....	\$62,057
1862.....	67,990

Increase.....\$5,972

The Michigan Central Road earned the first week in January:

1862.....	\$51,568 91
1863.....	46,121 56

Increase.....\$5,347 35

The Galena and Chicago earned the same week in

1863.....	\$27,929
1862.....	21,957

Increase.....\$5,872

The earnings of the Alton and Terre Haute Railroad for the third week in December are as follows:

1862.....	\$27,604 19
1861.....	18,487 58

Increase.....\$9,114 53

The Michigan Southern Railroad earned the first week of January:

1863.....	\$47,777
1862.....	36,119

Increase.....\$11,658

The Chicago and Rock Island Railroad earned the first week in January:

1863.....	\$33,977
1862.....	29,320

Increase.....\$2,597

The Illinois Central Railroad Company declared to-day a dividend of 2 per cent on the scrip, common and full-paid stock, payable 2d February prox. The payment on the full paid stocks is in anticipation of that due 1st July. The net income derived from the land and the traffic of the road for 1862 will be about \$1,800,000. Out of this the interest charge on the bonds was \$1,037,600. The best feature of the concern is the steady reduction of debt since 1858. The interest charge on bonds was in

1858.....	\$1,639,412 69
1859.....	1,406,437 05
1860.....	1,388,551 11
1861.....	1,110,222 83
1862.....	1,037,599 68

The traffic has been since the 1st of June quite beyond the supply of cars, and it is probable that the road would have earned \$4,500,000 gross if 1,000 more cars had been added to the rolling stock.

The Milwaukee and Prairie du Chien Railroad earned the past two years:

1862.....	\$1,163,955 76
1861.....	1,158,466 67

Increase for 1862.....\$10,549 09

The road earned the first week of January:

1863.....	\$12,218 58
1862.....	19,719 80

Decrease.....\$7,501 22

This road earned about 3 per cent the past year on the common stock. The managers estimate the Spring business at a falling off from last year in consequence of the failure of the crop along the line.

The following are the earnings of the Chicago and North-Western road for the week ending Jan. 7, 1863, from

Passengers.....	\$5,096 50
Freight.....	7,280 73
Express.....	221 67
Mails.....	423 95

Total earnings.....\$13,924 13

Corresponding week 1862.....10,434 09

Increase.....\$3,439 04

The Chicago, Burlington and Quincy Railroad (264 miles) earned in December, \$200,312, against \$154,980 in December, 1861—an increase of \$45,332.

The annual report of the Connecticut River Railroad states that the receipts last year amounted to \$268,152, and the expenditures \$134,297, making the net earnings \$133,854. A dividend of \$6 per share has been paid, and there is a surplus of \$59,819 on hand.

The Oswego and Syracuse Railroad Company has declared a semi annual dividend of 3½ per cent, payable on and after February 20. The earnings of the road for the year ending Sept 30, 1862, were.

Passengers.....	\$64,049 19
Freight.....	73,052 57
Other sources.....	3,532 45
Operating expenses.....	65,220 01

Net earnings.....\$75,414 20

The capital stock of the company is \$350,000. The debt is \$208,500.

The Erie Railway Company is expected to make a dividend of 5 per cent on the preferred stock, although a strong effort will be made to induce the directors to declare 7 per cent.

COLUMBUS AND CINCINNATI R. R.

—The annual meeting of the Cleveland, Columbus and Cincinnati Railroad was held at Cleveland on Wednesday. The business of the road for the year 1862, is thus stated:

EARNINGS FOR ELEVEN MONTHS ENDING NOVEMBER 30, 1862.

Passengers.....	\$407,956 69
Freight.....	1,005,004 69
Express.....	19,368 82
Mails.....	24,550 12
Rents.....	75,899 90
Other sources.....	533 11

Total.....\$1,537,313 33

Interest on deposits.....2,732 78

Interest on deposits uncollected (estimate).....4,470 00

December earnings (subjected to corrections).....179,553 38

Total for the year.....\$1,724,069 49

Expenses, eleven months.....\$567,462 98

Expenses, December, estimated.....80,000 00

Duties and taxes.....33,108 76

Interest.....26,346 84

Exchange.....19 26

Total.....706,937 38

Net earnings for the year.....\$1,017,131 61

Cash dividend paid Aug. 1, 1862, 5 per cent.....\$227,310 00

Cash dividend declared, payable Feb. 2, 1863, 5 per cent., and 5 per cent. extra.....500,000 00

Total.....737,310 00

Surplus for the year 1862.....\$379,821 61

Surplus earnings Jan. 1, 1862.....\$416,825 79

Less amounts charged this account in settlements of old claims, and for worthless notes and accounts.....32,016 61

Less stock dividend paid Aug. 1, 1862, 5 per cent.....237,310 00

Total.....\$147,499 18

Surplus Jan. 1, 1863.....\$427,320 79

Expended during the year for new equipment and for permanent improvement.....125,498 00

Earnings, excluding interest on deposits.....1,537,313 33

Total.....\$1,716,866 71

Expenses, excluding interest, duties and taxes.....567,462 99

Total.....\$1,149,403 72

Operating expenses, 37¼ per cent. of earnings.

Total.....\$147,499 18

Surplus Jan. 1, 1863.....\$427,320 79

Expended during the year for new equipment and for permanent improvement.....125,498 00

Earnings, excluding interest on deposits.....1,537,313 33

Total.....\$1,716,866 71

Expenses, excluding interest, duties and taxes.....567,462 99

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CAST STEEL WORKS. OF FRIED. KRUPP,

At ESSEN in Rhenish Prussia.

Patent Railway Tires, without a weld. Axles, Cannon, Anchor Flukes, Propeller Blades and Shafts. Cranked Axles and Shafts, up to Twenty Tons weight.

CAST STEEL IN BARS, BEST QUALITY,

Suitable for Axles, Shafts, Rolls, Tools, Dies, Needle and Music Wire, Fine Cutlery, &c,

KRUPP'S TIRES

Are cheaper at their cost than Iron ones gratis.

They will, without turning, entirely outwear the best Iron ones.

Wear uniformly, without flat places, or lamination.

Are not affected by extreme cold.

More than Forty Thousand of these Tires have been supplied.

KRUPP'S AXLES

Possess similar advantages over iron ones that the Tires do.

THOS. PROSSER & SON, 28 Platt St., N.Y.

SOLE REPRESENTATIVES IN AMERICA.

HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

Carriage, Tire, Machine, Plow, & all kinds of

SCREW BOLTS,

No. 535 & 537 Central Avenue,
CINCINNATI.

BRIDGE BOLTS, Rivets of all sizes, Coach Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27, 13

Philadelphia, Wilm'gton & Baltimore

RAILROAD!



FOUR PASSENGER TRAINS DAILY!

RAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11, P. M., Express.

On Sundays at 3.30, A. M., and 11, P. M.

Leave Baltimore for the North and West daily, at 8.30; A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail, and 7.00 P. M., Express.

On Sundays at 7, P. M., only.

Through connections made for all points at the North, East and West.

WM. CRAWFORD, Agent.

KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums awarded by Franklin Institute.)

T. F. RANDOLPH & BRO.

Mathematical Instrument Makers

No. 67 West 6th St. bet Walnut & Vine,
CINCINNATI O.

CHICAGO, GREAT WESTERN AND
NORTH-WESTERN LINE—INDIANA-
POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS.

CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis, Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—5:00 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—12:45 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—5:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.
W. H. L. NOBLE,
General Ticket Agent

C. R. COTTON, Cincinnati

J. T. CRAPSEY,
ATTORNEY AT LAW,

—OFFICE—

N. W. Cor. Walnut & Sixth Street,
CINCINNATI

KNIGHT BROS. Consulting Engineers,

—AND—
COUNSELLORS
IN

PATENT CAUSES,

Solicitors of American and Foreign Patents.

Sprague's Bld'g.

OPP. POST OFFICE,

CINCINNATI, O.

W. M. F. HEWSON, STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and tax collections.

BUSH & LOBDELL. Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

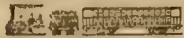
CELEBRATED WHEELS.

Either Single or Double Plate,
With or without Axles.

WHEELS FITTED

To Hammered or Rolled A
In the best Manner, at the Shortest Notice,
Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition
The well-earned reputation of this Road for
SPEED, SECURITY AND COMFORT
Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the recent *Troubles upon the Border* have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting WASHINGTON CITY en route*—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the **ONLY ROUTE** by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wes. Ag't, Bellaire, O.
I. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route
TO

NEW YORK, BOSTON,

AND ALL EASTERN CITIES,

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE **ONLY ROUTE** running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.
Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6. CHARLES MINOT, Gen'l Sup't

W. MORRILL. G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

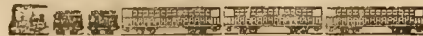
Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men the West that all work furnished by us shall be of the best quality in style, workmanship and material.
Orders are respectfully solicited, with the assurance that no will be spared to give entire satisfaction.

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK.
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK
ONE TRAIN RUNS DAILY (430 MILES.)
VIA ALLENTOWN, WITHOUT CHANGE OF CARS.
Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.
BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.
FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.
ON NIGHT TRAINS TO
Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freight of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburgh.

CLARKE & CO., Transfer Agents, Pittsburgh.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

W. W. ALKMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.

CLARKE & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

G. B. NEAL, Parkersburg, Virginia.

HALL & CO., Marietta, Ohio.

H. S. PIERCE & CO., Zanesville, Ohio.

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K. McNEELY, Mayville, Ky.

J. P. JOHNSTON, Ripley, Ohio.

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R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drovers and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.

L. L. HOUPT, Gen'l Ticket Agent, Philadelphia.

H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	9:20 P. M.
Mail and Express.....	7:00 A. M.	11:40 P. M.
Columbus Accommodation.....	8:30 A. M.	6:20 P. M.
Morrow Accommodation.....	4:00 P. M.	11:05 A. M.
	6:00 P. M.	8:05 A. M.

Cincinnati Hamilton and Dayton RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	7:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	7:00 A. M.	11:40 P. M.
Cin. & Chicago Air-Line Ex.....	8:00 A. M.	8:50 P. M.
Dayton and Richmond.....	3:15 P. M.	1:30 P. M.
Day., Toledo & Detroit Huntsville.....	5:20 P. M.	10:55 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	8:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:50 and
Eastern Night Express.....	10:00 P. M.	7:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	5:00 A. M.	12:20 P. M.
Indianapolis and Terre Haute.....	5:00 A. M.	12:20 P. M.
Decatur, Springfield & Quincy.....	12:45 A. M.	4:45 P. M.
Chicago Night Express.....	5:00 P. M.	10:40 A. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY.

For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	6:15 A. M.	10:00 P. M.
Louisville and St. Louis Night Ex.....	7:10 P. M.	7:30 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES slower than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

P. W. STRADER.

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Railroads.

W. H. L. NOBLE.

General Ticket Agent Indianapolis & Cincinnati Railroad.

E. F. FULLER.

General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLAND STREET

NEW YORK.

ALFRET BRIDGES.

JOEL

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.

Steel Wire and Whalebone Tube BRUSHES.
Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES
Glass Enamelled Iron WATER PIPE
Wrought Iron STREAM PIPE.

THOS. PROSSER & SON,
28 Platt Street, N. Y.

N. W. BALDWIN, MACHEW BAIRD,
M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotive &c. &c.

419 y

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We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at-

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being alike on both sides, impossible to ravel, and leaving no chain or ridge on the underside, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

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Engine and Car Axles, Pump and Piston Rods

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COAL OR WOOD BURNING LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

-AND ALSO TO-

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Wrought Iron Welded Tubes—from ½ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON, } Editors

CINCINNATI:

THURSDAY, JANUARY 29, 1863.

THE RAILROAD RECORD,
PUBLISHED EVERY THURSDAY MORNING,
BY WRIGHTSON & CO.
(OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion.....	\$100
“ “ per month.....	300
“ “ six months.....	1200
“ “ per annum.....	2000
“ column, single insertion.....	500
“ “ per month.....	1000
“ “ six months.....	4000
“ “ per annum.....	8000
“ page, single insertion.....	1500
“ “ per month.....	2500
“ “ six months.....	11000
“ “ per annum.....	20000

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THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—		Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	9.20 P. M.	
Mail and Express.....	8.30 A. M.	6.20 P. M.	
Columbus Accommodation.....	4.00 P. M.	11.05 A. M.	
Morrow Accommodation.....	6.00 P. M.	8.05 A. M.	
Cincinnati, Hamilton & Dayton—			
Cin. & Chicago Air Line.....	8.00 A. M.	8.50 P. M.	
Dayton & Sandusky.....	7.00 A. M.	6.45 P. M.	
Dayton & Toledo.....	7.00 A. M.	11.40 P. M.	
Dayton Accommodation.....	3.15 P. M.	11.40 P. M.	
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.55 A. M.	
Cin. & Chicago Air Line Exp.....	7.00 P. M.	8.10 A. M.	
Hamilton Accommodation.....	7.00 P. M.	6.50 A. M.	
Eastern Night Express.....	10.00 P. M.	7.10 A. M.	
Sandusky, Dayton & Cincinnati—			
Morning Express.....	7.00 A. M.	6.45 P. M.	
Bellefontaine Accommodation.....	5.20 P. M.	10.55 A. M.	
Marietta & Cincinnati—			
Mail.....	7.45 A. M.	5.25 P. M.	
Accommodation.....	3.30 P. M.	9.55 A. M.	
Ohio & Mississippi—			
Mail.....	6.15 A. M.	10.00 P. M.	
Express.....	7.00 P. M.	7.10 A. M.	
Indianapolis & Cincinnati—			
Mail.....	5.00 A. M.	12.20 A. M.	
Chicago Express.....	5.00 P. M.	10.40 A. M.	
Dayton & Michigan—			
Toledo, Detroit & Chicago Exp.....	7.00 A. M.	11.40 P. M.	
Toledo & Chicago Express.....	5.20 P. M.	10.55 A. M.	
Cincinnati & Chicago Air Line—			
Mail and Express.....	8.00 A. M.	8.50 P. M.	
Night Express.....	7.00 P. M.	8.10 A. M.	
Cincinnati, Wilmington and Zanesville—			
Morning Express.....	8.30 A. M.	6.45 P. M.	
Accommodation.....	6.00 P. M.	8.20 A. M.	
Kentucky Central— (City time.)			
Fast Train.....	6.45 A. M.	10.37 A. M.	
Cond Train.....	2.10 P. M.	6.30 P. M.	
The trains on the Little Miami, and Cincinnati, Hamilton Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which 7 minutes faster than Cincinnati time.			
Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.			

ANNUAL MEETINGS IN FEBRUARY.

The following railroad companies hold their annual meetings in the month of February.

In the loyal States.

The Allegheny Valley Railroad, at Pittsburgh, Pa., Feb. 4th.

The Bellefontaine & Indiana Railroad, at Marion, O., the third Wednesday in February.

The Eastern Railroad, at Boston, Mass., in the first Monday in February.

The Eaton & Hamilton Railroad, at Eaton, Preble county, O. on the first Monday in February.

The Housatonic Railroad, at Bridgeport, Conn.

The Manchester and Lawrence Railroad, at Concord, N. H., on the third Wednesday in February.

The Marietta & Cincinnati Railroad, at Chillicothe, O., on the second Wednesday in February.

The New Haven, New London & Stonington Railroad, at New Haven, Conn., on the 23d of February.

The Pennsylvania Railroad, at Philadelphia, on February 3d.

The Philadelphia & Erie Railroad, at Philadelphia on the 10th of February.

The Pittsburgh, Columbus & Cincinnati Railroad (the Steubenville line,) at Steubenville, O., on the second Tuesday.

The Potsdam & Watertown Railroad, at Watertown, New York, on the first Wednesday in February.

The Vermont & Massachusetts Railroad, at Boston, Mass.

The Western Railroad, at Boston Massachusetts.

In the seceded States.

The Charlotte & South Carolina Railroad, at Columbia, on the first Wednesday after the first Monday in February.

There are probably a few other companies which we have not got on our list. We would feel under obligations to the officers of these companies if they would notify us of the date of their meetings.

We would also request the officers of the above companies to favor us with early copies of their reports. Many of them are undoubtedly now in type, and could be sent as well now as at any future time. A well managed railroad company has nothing to fear from a full and frank expose of its affairs; and as a public corporation, deriving its right of existence from the public, its revenue and support from the public, and relying on the public for the market value of its securities, it owes to the public such an expose of its affairs, at regular intervals, as will enable them to judge of the value of its stocks and bonds.

Again, if railroad reports are carefully prepared, embracing the results of operation in detail, as well as the financial statement of the company, the comparison of these reports may

be useful to the officers of all companies. They are so many mile-stones on the road of improvement and will be carefully noted by all careful travelers on the track.

Send us your reports early.

PACIFIC RAILROAD.

The President has recently decided that the gauge of the Union Pacific Railroad Company, for which Congress, at its last session, made extensive grants of land and money, shall be five feet. It is understood that the interests of the Erie Railway Company claimed it should be six feet, while those interested in the New York Central Railroad, the Lake Shore lines, and other leading narrow gauge roads claimed 4 ft. 8½ in., or 4 ft. 10 inches. The President being in a quandary resolved to compromise the matter and adopt the five feet gauge. We think this decision of the President a very unwise one, inasmuch as it accommodates no one and disoblges every one. Nine-tenths of the railroads of the loyal States are either 4 ft. 8½ in., or 4 ft. 10 in. gauge. While not one-tenth, and, at the present time, hardly one-twentieth of the railroads of the North are six feet gauge, and a very small proportion are of the five feet gauge. It is not our province or desire to favor railroads of one gauge above those of another; but in a work of national character, like the great Pacific Railroad, a gauge should be adopted which will accommodate the majority of roads which may connect with it. Moreover, we believe it is conceded by ninety-nine hundredths of railroad men that the broad gauge is neither the safest nor the most economical one to run. We do not see, therefore, the propriety of the Presidents allowing the desires of the few broad gauge lines, who have undoubtedly urged their claims very strongly upon him, to interfere with a great public duty, and institute a break of gauge because it was impossible to please both the majority and minority.

LONG ISLAND R. R.—The annual statement of the Long Island Railroad for the year ending September 30th, 1862, shows the total capital stock to be \$1,852,715 79, out of \$3,000,000 authorized by charter. The total funded debt of the company is \$782,462 31, and the total floating debt is \$15,212 73; making a total of indebtedness of \$797,675.04 or about 42 per cent of the capital of the company.

The road is 98 miles in length, and cost for construction and equipment \$2,928,474 56. The total receipts of the year were \$294,537.93. The total passenger movement on the road was 383,983 passengers, and the total freight movement was 96,893 tons of freight carried. The expenses were as follows:

Expenses of maintaining road.....	57,821 26
“ repairs.....	30,120 53
“ operating road.....	33,754 64
Dividend.....	43,000 00
Interest.....	42,811 25
Rent, sinking fund &c.....	12,723 83
Thompson's bonds and interest.....	48,679 75

CLEVELAND & MAHONING R. R.

The annual report of this company, embracing a statement of its affairs to Jan. 1, 1863, is published. The annual meeting of the stockholders takes place on the 4th Wednesday in January. The length of road in operation is 68½ miles. It extends into the Northern-mineral regions of the State, and as will be seen by the report, is a well and economically managed railroad:

The earnings and expenses of the road for the years 1861 and 1862 were as follows, to-wit:

RECEIPTS.		1861.	1862
Passengers		\$58,643 90	\$66,034 94
Express		1,297 63	1 447 17
Freight		84,157 30	99,053 07
Ore		34,206 26	41 229 94
Coal		194,907 79	164,468 68
Mail		4,378 56	2,973 47
Gross earnings		\$375,791 44	\$375,209 27

EXPENSES.		1861.	1862.
Repairs of track		\$44,673 15	\$44,565 88
" bridges		3,890 47	9,035 69
" docks		15 00	230 29
" buildings		1 50	79 67
" fences		818 56	1,157 02
" shops		1,800 84	1,699 56
" engines		13,136 18	15,844 22
" pas. and bag. cars		1,081 81	2,412 99
" fr't and coal		8,823 02	6,914 73
" grav. & hand		1,265 46	366 50
Run'g Exp's of pass. trains		1,760 68	1,792 05
" fr't & coal		13,119 75	12,849 43
" gravel		1,470 45	1,781 85
Damages to property		276 00	109 75
" freight		39 73	193 65
Personal damages and gratuities		341 30	107 17
Conductors		2,571 44	2,612 89
Baggage and Brakemen		4,987 34	4,689 59
Station expenses		15,246 38	14,757 39
Salaries and offices expenses		9,103 58	8,653 46
Legal expenses		1,210 61	1,002 39
Water stations		1,245 60	1,573 14
Rents		2,660 00	2,787 06
Coal		8,500 13	8,649 81
Wood		4,470 71	2,694 14
Total working expenses		\$142,617 57	\$146,537 72
Net earnings		233,173 87	228,651 55

From which deduct interest and exchange	\$147,144 03	\$136,993 02
Taxes	6,539 74	5,108 10
Leaving actual net profits	\$153,683 77	\$142,104 12
Length of road	79,490 10	86,547 43
Miles run by passenger and mixed trains	83,584	83,584
" freight, coal, ore and yard trains	135,214	135,214
" gravel and wood trains	29,289	29,289
Total mileage	248,087	248,087

	1861.	1862.
Gross earnings per mile of road	\$5,608 82	\$5,477 51
Working expenses per mile of road	2,128 62	2,139 52
Gross earnings per mile run	1 52 37-100	1 51 6-100
Working Expenses per mile run	57 2-100	59
Working expenses per centum of earnings	37 95-100	29 6-100

PRINCIPAL ARTICLES TRANSPORTED.

	1861.	1862.
Passengers	69,124	73,458
Through coal, tons	178,948	156,248
Way coal	27,021	30,078
Lake ore	37,870	49,809
Native ore	4,677	7,816
Limestone	113	948
Pig iron	8,908	13,163
Bar iron	4,335	6,830
Nails	3,737	5,041
Butter	566	622
Cheese	3,447	3,836

You will observe that while there has been a handsome increase in receipts from passengers, freight and ore, there has been a large decrease in receipts from coal, which is explained by the greatly increased demand by furnaces and rolling mills in the Mahoning Valley, which are now consuming some 800

tons per day, and the fact that some of the mines heretofore worked are nearly exhausted. To remedy the latter difficulty, the company is now constructing a branch of its road running northwardly from Youngstown to the coal fields in Hubbard and Brookfield townships, which it is supposed will be completed by the first of May next. These fields, *without any doubt*, will furnish all the coal which will be required for consumption by the furnaces and rolling mills in the Mahoning Valley, and all that can be sold in Cleveland for a very long period of time. The quantity already *known* to exist along the line of this branch road is *immense*, and new discoveries are almost daily being made.

It will be seen that while the gross earnings of the road for 1862 are but \$582 17 less, the expenses are \$3,940 15 more, thus making the net earnings \$4,522 32 less in 1862 than in 1861, which is more than accounted for by the increased cost of bridge repairs. During the year a new "Howe" bridge has been built over the Cuyahoga at Cleveland, and new and substantial iron bridges over the C. C. & C. R. R. track, and Eagle Creek, in Winham. The iron bridges cost more than double the amount paid for their wooden predecessors, but their total cost is charged to "bridge repairs."

You will observe that, although there is a falling off in net earnings of \$4,522 32, the decrease in interest and taxes leaves the actual net profits in 1862 \$7,057 33 greater than in 1861.

Much inconvenience and extra expense has been caused by the want of sufficient accommodations at Cleveland for handling coal, ore and miscellaneous freight. Negotiations are now pending for the construction of Section 1, and it is believed that this important and much needed work will be completed during the current year.

The growing short trade of the Mahoning Valley, with the prospective increase of the through traffic in coal and Lake ore, render additional rolling stock indispensably necessary. Arrangements are therefore made for building at the shops of the company fifty coal and twenty house cars.

During the past year, one superior freight engine and twenty-five coal and platform cars have been added to the rolling stock, which is all in good condition and consists of

13 Locomotives.	
6 First Class Passenger Cars.	
5 Baggage and Mail	
3 Caboose	
50 House freight	
194 Coal	
31 Platform	
11 Hand	
2 Hand Dump	
14 Iron	

The balance sheet of the Company's books of January 1, is as follows:

ASSETS.	
Real Estate	\$251,185 48
Right of way	98,717 21
Construction	\$2,113,008 12
Docks	30,329 10
Shops and engine houses	49,353 26
Hubbard branch	10,568 71
Locomotives	\$119,846 45
Cars	178,942 79
	298,789 24

Rails, chairs, spikes, ties, coal, wood and shop materials on hand	29,187 72
Canal and R. R. stock	23,340 00
Bills receivable	12,843 64
	\$2,917,322 48

LIABILITIES.

Capital stock	\$1,036,065 48
First mortgage bonds	\$550,000 00
Second "	241,200 00
Third "	\$738,400
Less sinking fund, in hands of G. T. Taylor, Esq., Trustee	80,200 658,200 00
Real Estate bills	35,445 60
Bills payable	51,491 77
Sundry accounts	41,919 63
	\$2,917,322 48

The bonds of the company mature as follows, to-wit:

1st	Aug. 1, 1873
2d	Sept. 15, 1874
3d	Sept. 15, 1876

Early in December last, it was determined to allow the holders of second, to exchange them for third mortgage bonds, giving them a premium of ten per cent, since which time \$255,000 have been thus redeemed, leaving but \$244,200 outstanding. *For the present*, exchanges will continue to be made on the same terms.

"It affords the Directors pleasure to say to the Stockholders, that the several employes of the Company have most faithfully performed their duties during the past year."

The officers for the past year were as follows:

David Tod, *President*; Charles L. Rhodes, *Vice Pres't* and *Sup't*; O. M. Burke, *Sec'y* and *Treasurer*; Geo. Robinson, *Engineer*; John Young, *Master Machinist*.

Directors.—David Tod, Charles Smith, Fred'k Kinsman, Dudley Baldwin, Reuben Hitchcock, Joseph Perkins, Henry B. Perkins, James Magee, R. W. Cunningham.

WHAT IT TAKES TO FEED A LARGE CITY.—The sum total of all the animals consumed in New York city during the year 1862 is given as follows:

244,864 bullocks, average estimated net weight 725 lb, making a total of 177,526,400 lb, which at 7 63 estimated average price per cwt. is \$13,633,027 52.

30,466 calves, estimated 75 lb net, makes 2,284,775 lb, which at 8c per lb or \$6 a head is \$183,190.

484,342 sheep and lambs, estimated at 45 lb each, makes 21,585,390 lb, which at 9c per lb is \$1,961,585 10.

1,148,209 swine, estimated at 140 lb net each, makes 160,749,260 lb which at 6c per lb is \$9,644,589 60.

This makes a grand total of 352,355,825 lb of meat, and the total sum supposed to be paid the drover by the butcher, \$25,423,758.22.

MICHIGAN RAILROAD LAND GRANTS.—The time in which the Congressional grant of lands to the State of Michigan for railroad purposes was to be accepted, is drawing to a close. Some action will have to be had, in reference to this subject, by the Legislature of Michigan.

PITTSBURGH AND CONNELLSVILLE RAILROAD COMPANY.

The annual meeting of the stockholders of the Pittsburgh and Connellsville Railroad was held in the city of Pittsburgh on the 1st December. The president of the company, B. H. Latrobe, Esq., submitted the annual report, of which we make the following abstract:

On the 31st of October, when the company's official year terminated, the floating debt was \$110,419.19, being \$25,105 10 greater than on the same day the previous year. This increase is composed of balances due on purchase of locomotives and cars, interest on real estate debt, right of way Turtle creek division, special loan (in part) from city of Baltimore, and some other unpaid claims of a miscellaneous character.

The total gross revenue of the year from all sources has been \$129,918.

The current expense of maintenance, working and administration during the same period has been \$90,480 57, leaving \$39,437 24 as the net revenue of the year.

The expenditures during the year have for construction and equipment, right of way and real estate, have been \$175,292 30 on the Western and \$768 84 on the Eastern division of the road.

The general expenses of the company, embracing salaries, legal expenses, stationery, printing, office rent and miscellaneous, is \$10,942; an increase of \$3,143 on those of 1861, but only an increase of \$1,773 on those of 1860.

The number of passengers carried was 143,510, and the revenue therefrom \$56,253, against 60,968 passengers and \$22,426 revenue therefrom the previous year; showing an increase of 82,542 passengers, or 135 per cent, and \$33,827 of revenue, or 151 per cent.

The freight transported was 85,763 tons, and the revenue therefrom \$69,992, against 56,530 tons and \$43,893 revenue therefrom the preceding year; an increase of 29,224 tons, or 51½ per cent, and \$25,999 of revenue, or 59 per cent. The receipts for carriage of the mail were \$3,560 and from shop work \$113. The total revenue being, as before stated, \$129,918, which compared with \$70,106, the revenue of the previous year, exhibits the gratifying increase of \$59,812, or 85 1-3 per cent.

President Latrobe, in concluding his report, remarks:

"The results of the last year's working show that the road as a local improvement is doing well, and after a time would sustain itself, benefit greatly the country it traverses, and the city of Pittsburgh, its Western terminus. But with these expectations neither the company nor the public would rest satisfied. The road must be completed to its eastern terminus—this is the great purpose for which the board are laboring, and hope not to labor in vain.

INTERNAL REVENUE.

OUR CAPACITY FOR TAXATION.

The Internal Tax Law of the last session of Congress has now been put fairly into operation. Hence, the estimates of the Commissioner may now be regarded more as the results of experience, than as the guesses of a shrewd man. In his report on this head Commissioner Boutwell says:

During the last month I have caused a careful investigation to be instituted into the several sources of revenue, and an estimate to be made of the amount which may be derived from each source. According to this estimate, there will be received from all sources except stamp duties, during the current fiscal year ending the 30th of June next, the sum of \$61,777,799. I estimate that the receipts from stamp duties during the same period will amount to the sum of \$15,000,000—making an aggregate revenue of \$76,777,799. This result has been reached by the most careful inquiry that could be instituted into the amount of the various kinds of manufactures, the revenue to be derived from each, and by a like careful inquiry into all the other sources of income. This estimate is less by about \$8,000,000 than the general estimate which I had the honor to submit to you early in the month of December last. I have only to say that in the more careful investigation which has recently been made, the revenue from each source has been estimated below rather than above what may reasonably be anticipated. It may be assumed, further, that without material change in the business of the country, the revenue from the same sources for the fiscal year 1863-4 will not be less than \$150,000,000.

The Commissioner estimates that the cost of collecting the revenue will be 2 41-100 per centum of the whole receipts, and that it can never exceed three per centum of the receipts.

This is much below the estimates even of the framers of the law. The Commissioner recommends that the operation of the law be limited to the States instead of extending also over the Territories, as provided by the law.

Assuming that the Commissioner's estimate of \$150,000,000 will be the amount raised under the Congressional Tax Law. The grand total of State County, and local taxes which are paid in the various States, cannot fall short of an equal amount; making in all about \$300,000,000 per annum paid by the loyal States for the support of the government, which would be equal to nearly \$15 per head on the people.

METROPOLITAN RAILROAD.—A bill has been reported to the House of Representatives which provides for four roads from Washington to Point of Rocks direct; one from Point of Rocks to Hagerstown; one from Washington to Lewes, in Delaware, intended to be part of the air line to New York; one from Cumberland to Connellsville. The first is to be built by the Metropolitan Company, whose bonds, to be secured by first mortgage, are to be guaranteed by Government, as provided in the bill. The second is to be built by the corporation of Washington, which is to guarantee the bonds of the road.

NEW YORK & NEW HAVEN R. R.—The annual meeting of this company does not take place till the second Tuesday of May; and the fiscal year expires March 31st. But the directors make a report to the State Legislature for the year ending September 30. The following is the report for the year ending September 30, 1862, which embraces six months of the year as last reported and six months of the current fiscal year:

Capital stock, as by charter.....	\$3,000,000 00
" paid in.....	2,980,899 33
Funded debt.....	2,000,000 00
Floating debt.....	69,136 42
Cost of road and equipment.....	\$5,419,524 70
Number of passengers carried in cars.....	1,047,947
" tons of freight.....	70,782
Expenses of maintaining the road.....	\$110,820 83
Expenses, repairs, etc.....	130,540 70
" of operating the road.....	300,019 57
Interest.....	125,820 00
Dividends.....	180,000 00
Harlem share of receipts.....	97,951 73
Loss on "Canal road".....	25,842 40

Receipts.

From passengers.....	\$756,925 36
From freight.....	165,805 42
From other sources.....	72,521 09
Total.....	\$995,251 87

PHILADELPHIA & READING RAIL- ROAD COMPANY.

The report of this company to the stockholders, embracing its operations for the year ending Nov. 30, 1862, is published. Its statement of receipts and expenses is as follows:

• RECEIPTS.

From travel, 396,466, equal to 150,970 through passengers.....	\$ 403,563 77
From freight on merchandise, 451,732 tons.....	523,416 16
" coal, 2,310,990 tons.....	2,879,419 55
" United States mail.....	19,618 00
" other sources.....	85,812 74
	\$3,911,830 22

EXPENSES.

Transportation expenses.....	\$977,741 58
Roadway.....	256,934 62
Dumpage, rents, taxes, profit and loss, damages, &c.....	301,906 94—\$1,536,583 14

Net profit.....	\$2,375,247 08
Interest on bonded debt.....	\$706,999 00
Interest on bonds and mortgages.....	35,412 00
Renewal fund—5 cents per 100 tons on 558,944,544 tons transported one mile during the year.....	279,472 27—\$1,021,853 27

Dividend fund.....	\$1,353,393 81
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Which has been disposed of as follows:

Sinking funds.....	\$386,580 90
State tax on capital for 1862.....	28,374 71
Dividend on pref. stock.....	108,626 00
Accrued interest for 1862 on reserved dividends preferred stock.....	17,926 56—\$ 541,408 17

Balance of dividend fund for 1862.....	\$ 811,985 64
Add 1861.....	178,970 57

Total reserved fund.....	\$ 990,956 21
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The winter of 1861-62 will be long remembered by the miners and producers of coal as a period of great discouragement and depression. From this cause much less than the average amount of preparation was made for the business of the past season.

Upon the opening of navigation in the spring, coal was offered in the principal markets of the country at prices so much below any heretofore known, that it was felt that the interests of the company, as well as its duty to those who relied upon it for means of access

to market, required of it an unusual reduction in the rates of transportation.

They were according established until the 1st of July sufficiently low to enable schuylkill coal to maintain its previous position.

On the 4th of June a freshet occurred, the most disastrous ever known in the coal district. The road escaped with trifling damage, its traffic being interrupted from this cause only two days.

Since the 1st of July a largely increased business has been done at satisfactory prices.

The following tabular statement in detail for each branch of traffic shows the comparative results of the year :

	1861.		
Travel.....	140,551 passengers,	\$	338,905
Merchandise.....	324,958 tons,		406,321
Coal.....	1,639,535 tons,		2,111,023
Mail.....			19,618
Miscellaneous.....			29,971
Gross receipts.....		\$	2,905,838
Gross expenses.....			1,492,933
Net profits.....			\$1,412,905
	1862.	Increase.	Per cent.
150,970 passengers.....	\$403,564	\$ 64,659	19 1 10
451,752 tons.....	523,416	117,095	28 8 10
2,310,990 tons.....	2,879,419	768,396	36 4 10
Mail.....	19,618		
Miscellaneous.....	85,813	59,842	199 6 10
Gross receipts.....	\$3,911,830	1,005,992	34 6 10
Gross expenses.....	1,816,055	323,122	21 6 10
Net profits.....	\$2,095,775	682,870	48 3 10
Gross expenses, including Renewal Fund, in the year 1861 were 51 38 100 of gross receipts.			
" 1862 " 46 42 100 " Decrease 4 96 100			

The receipts and expenses per passenger and per ton have been as follows, viz:

	1861.		
Per passenger, cost.....	\$1 34 5-10	Received....	\$2 41 3-10
" merchandise per ton.....	70 2-10	"	1 25 4-10
" coal.....	41	"	1 28 7-10
Per passenger, cost.....	\$1 10 4-10	Received....	\$2 67 3-10
" merchandise per ton.....	53	"	1 15 8-10
" coal.....	35 8-10	"	1 24 6-10

The result of the year's business, as condensed from transportation and income account may be stated thus :

Gross receipts.....	\$3,911,830 22
Deduct working expenses, including Renewal Fund.....	1,816,055 41
Profits or rec'ts over cost of working the road.....	\$2,095,774 81
From which deduct the interest on bonded debt.....	\$706,969 00
Bonds and mortgages.....	35,412 00—\$ 742,381 00
Leaving for net profit or dividend fund.....	\$1,353,393 81

This has been credited as follows :

Sinking Funds.....	\$386,580 90
State tax on capital.....	28,374 71
Dividend on preferred stock..	168,626 00
Accrued interest for 1862, on preferred stock dividend not paid.....	17,826 56—\$ 541,408 17
Balance carried to Reserved Fund 1862.....	\$ 811,955 64
Amount to credit of Reserved Fund 1861, per report of Nov. 30, 1861.....	\$ 780,742 40
From which is deducted for sundry drawbacks on traffic for 1861 paid.....	\$18,451 58
Credit due to Sinking Funds out of income of 1861..	27,373 31
Differences between the par and estimated value of stocks and bonds held by the Company, and debts considered doubtful.....	555,946 94—\$ 601,771 83—\$ 178,970 57
Total Reserved fund.....	\$ 990,956 21

After deducting all expenses, including renewal fund and interest on bonds, the net

profits are \$1,353,393 81, which is equal to 11 72-100 per cent on all the outstanding stock, common and preferred. The chief items of expenditure to which this sum has been applied, are as follows :

On account of the payment of the \$450,642 72 script issued for the arrears of dividends on pref. stock.....	\$358,702 18
Bonds of the company for the sinking funds..	373,500 00
New cars and engines.....	284,323 35
Construction of the Mahanoy & Broad Mountain R. R. for which the bonds and stock of that Co. are held.....	347,990 00

The amount of bonds purchased for the sinking fund having accumulated to a sum sufficient to form a basis of a dividend in stock to the common stockholders, one of 7 per cent has been declared, payable on the 16 of February next.

The charges to construction or capital account during the year have been :

For real estate in St. Clairs, Schuylkill county, Conshohocken and Port Richmond.....	\$ 2,241 00
For locomotive engines and cars,	
507 eight-wheeled coal cars,	
1 8 four-wheeled coal cars,	
54 merchandise cars,	
2 eight-wheeled mail cars,	
1 eight-wheeled passenger car,	
722 Total cost.....	\$264,028 50
1 eight-wheeled tender.....	1,267 36
New engines.....	19,027 49—284,323 35

For Lebanon Valley Branch :

Final settlement of contract on account of construction.....	37,772 74
For propeller and coal barges.....	13,940 00
For Shamokin Valley & Pottsville Railroad purchase.....	50,000 00
For Schuylkill & Susquehanna Railroad stock.	13,447 50
For Phila., Reading and Pottsville Telegraph stock.....	50 00
	\$401,774 59

Fifty-three of the merchandise cars above referred to as purchased during the year, were received on the settlement of the last of the car loans.

The net profits of the Lebanon Valley Branch during the year, have been 9½ per cent, after paying the interest on the outstanding bonds issued for its construction.

The reports of the General Superintendent and of the Chief Engineer, together with the tabular statements which accompany them, exhibit in detail the operations of the transportation and roadway departments.

At the present time coal intended for consumption in the city of Philadelphia, as well as that destined for points on the Pennsylvania, the West Chester and the Baltimore railroads, is brought to the terminus of the road near Callowhill street, and excepting that which is sent down Willow street, is all hauled through Broad street to the coal yards, or to the several railroad stations, where it is again taken by a locomotive to its point of destination. During the past winter the capacity of the railroad in Broad street proved totally inadequate to pass the quantity of coal offering, although the hauling was continued day and night. With a view to withdraw this traffic from the streets of the city, to increase the business of the road, and to relieve the coal from an unnecessary charge, a joint agreement has been entered into with the Pennsylvania Railroad Company, and the Philadelphia, Wilmington and Baltimore Rail-

road Company, to construct the Junction Railroad from Belmont, near the foot of the old inclined plane on the Columbia Railroad, along the west bank of the Schuylkill river to the Baltimore Railroad, near Gray's Ferry, with suitable connections with the Pennsylvania and West Chester Railroads. The total length of the road will be 4½ miles. It is intended to be finished by the month of June next. To provide for the cost of the road, the bonds of the Junction Railroad company have been authorized to be issued to the amount of \$500,000, bearing 6 per cent interest, guaranteed by each of the companies who are parties to the agreement, in which it is also provided that the charge for the use of the road shall be adequate to pay the cost of repairing and working it, the interest on the bonds, and \$15,000 per year to a sinking fund, which is sufficient to redeem all the bonds before their maturity. For this reason the contingent liability of the company under its guarantee has not been included in the general account of its debts and assets.

The shipment of coal at Richmond in the winter season has always been more or less interrupted through the fear of ice in the Delaware river. With a view to avoid this impediment an agreement has been made with the Philadelphia, Wilmington, and Baltimore Railroad Company to construct a large pier in the river Delaware at New Castle, thirty miles below Philadelphia, where it is navigable at all seasons. The coal trains will leave the line at Belmont, passing over the Junction Railroad and through to New Castle without stopping. The pier is expected to be finished and ready for use next winter.

Piers Nos. 4, 6 and 8, at Port Richmond, have been extended during the past year, and several miles of additional sidings have been laid. These improvements have added greatly to the convenience and shipping capacity of the company's wharves.

At the last session of the Legislature the company was authorized to own vessels, to be employed in the transportation of coal from Port Richmond.

During the past season a propeller and two barges have been built, as an experiment, of an aggregate capacity of 700 tons. Their performance thus far indicates that they will equal the expectations that were entertained of them. It is believed that this mode of transportation will materially reduce both the time and cost of delivering coal at all points accessible to boats of their class. A dividend of 7 per cent out of the earnings of the year has been declared on the preferred stock, payable on the 15th inst.

The scrip issued for the arrears of dividends due on this stock, amounting with interest to \$450,642 72, fell due on the 31st of December. In accordance with the suggestion made in the last annual report, \$358,702 08 were purchased during the year, and the remainder, \$94,940 64, was paid at maturity.

\$373,500 of the bonds of the company have been purchased for the sinking funds during the year.

Owing to the high rates which the bonds of the company command, a portion of these are held provisionally in accordance with the terms of the sinking funds, as a security for the ultimate redemption of the loans to which they may be assigned. In view of the probable continuation of the present inflation of prices, it is suggested that authority be conferred on the managers to purchase the bonds of the company at current market rates, if they should deem it expedient to do so.

The following resolutions were adopted at the annual meeting on the 12th inst.:

Resolved, That the report of the Board of Managers, this day presented and read, be, and the same is hereby, approved, accepted and adopted.

Resolved, That the Board of Managers be, and they are hereby authorized, at their discretion, to carry into effect any of the measures proposed in their report, and if in their opinion needful, to enter into any contracts or agreements for that purpose.

Resolved, That the powers and authorities conferred upon and granted to the Board of Managers by the resolutions passed at the last annual meeting, be, and the same are hereby, continued.

Resolved, That the Board of Managers be, and they are hereby, authorized, at their discretion, to purchase the bonds of the company at current market rates.

Resolved, That a vote of thanks be, and the same is hereby, presented to the President and the Board of Managers for the very able manner in which the affairs of the road have been conducted during the past year.

CHICAGO & NORTHWESTERN R. R.

The following is the comparative statement of the earnings of the company for December, and for the nine months of 1862, from April 1, 1862, to January 1, 1863:

EARNINGS DECEMBER, 1862.

For month of Dec.	1862.	1861	Increase.
Passenger.....	\$31,003 77	\$22,399 55	\$ 8,604 22
Freight.....	57,353 43	49,754 75	27,593 68
Express.....	887 50	844 29	43 22
Mail.....	1,695 83	1,685 83	.....
Miscellaneous.....	59 00	140 84	.....
Car Mileage.....	.....	162 54	.....
Total.....	\$90,090 53	\$55,198 76	\$36,046 12
Total decrease.....	.....	.....	251 35
Total increase.....	.....	.....	35,791 77

EARNINGS FROM APRIL TO JANUARY.

	1862.	1861.	Increase.
Passenger.....	\$292,677 78	\$244,522 12	\$ 48,155 66
Freight.....	531,260 84	424,196 83	107,064 01
Express.....	7,941 94	7,319 30	622 64
Mail.....	15,202 47	14,750 37	452 10
Miscellaneous.....	1,882 85	297 95	984 10
Car Mileage.....	1,837 35	4,075 40	Dec. 2,238 05
Total.....	\$140,856 23	\$694,761 97	\$148,532 31
Total decrease.....	.....	.....	2,238 05
Total increase.....	.....	.....	146,095 26

STATEMENT OF INCOME ACCOUNT, JAN. 1, 1863.

Balance to credit of Income Account, as per report to April 1, 1862.....	\$362,615 35
By gross earnings from April 1, 1862, to Jan. 1, 1863:	
From passengers.....	\$292,677 78
From freight.....	531,260 84
From express.....	7,941 94
From mail.....	15,202 47
From miscellaneous.....	1,882 85
From car mileage.....	1,837 35
.....	\$940,856 23
Less for operating expenses.....	

sec. from April 1, 1862, to Jan. 1, 1863, as per statement attached.....	\$403,877 04
Less for interest on Flag Trust Bonds, due July 1, 1862.....	9,800 00
Less for interest on preferred First Mortgage Bonds, due August 1, 1862.....	43,750 00
Less interest on Appleton Extension Bonds, due August 1, 1862.....	6,440 00
Less for interest on Funded Coupon Bonds, due Nov. 1, 1862.....	26,460 00
Less for interest on debt.....	6,181 07
Less for exchange.....	601 04
Less for insurance.....	2,694 87
Less for taxes.....	1,002 23
Less on account Bellville accident.....	890 50
Less for expenses of Directors.....	137 33
Less for expenses of New York offices.....	4,430 39
Less for U. S. Government (tax on passenger earnings).....	3,641 87
Less on account Barstow's cavalry accident.....	3,492 27
.....	\$513,458 78
Leaving surplus of earnings over operating expenses, and amount paid for interest on Bonds, Exchanges, &c., from April 1, 1862, to Jan. 1, 1863.....	\$327,397 47
Leaving balance to credit of income account, being excess of earnings over operating expenses, and amount paid for interest on bonds, exchange, &c., from June 1, 1859, to Jan. 1, 1863.....	\$890,012 82

STATISTICS OF THE UNITED STATES.

In the report of Isaac Newton, Commissioner of the Department of Agriculture, recently created in the General Government, we find the following condensed statistics of the United States:

POPULATION, AREA, AGRICULTURAL PRODUCTIONS, &c.

Population, white.....	26,975,575
Population, free colored.....	487,996
Population, slaves.....	3,953,760
Total including Indians.....	31,749,281
Area of the United States, square miles.....	3,250,000
Aggregate of real and personal property, dollars.....	16,129,616,068
Value of productions of industry, do.....	1,900,000,000
Cash value of farms, do.....	6,650,872,507
Cash value of farming implements and machinery, do.....	247,027,496
Value of live stock, do.....	1,107,490,216
Value of lands improved, do.....	163,261,389
Value of lands unimproved, do.....	246,508,244
Wheat crop, bushel.....	171,183,381
Rye crop, do.....	20,976,286
Indian corn, do.....	830,451,707
Oat crop, do.....	172,534,688
Rice, pounds.....	187,140,173
Tobacco, do.....	429,390,771
Ginned cotton, bales, 400 lbs.....	5,195,677
Wool, pounds.....	60,511,343
Pean and beans, bushels.....	15,188,013
Irish potatoes, do.....	110,571,201
Sweet potatoes, do.....	41,606,302
Barley, do.....	15,635,119
Buckwheat, do.....	17,664,914
Value of orchard products, dollars.....	19,739,361
Wine, gallons.....	1,000,008
Productions of market gardens, dollars.....	15,541,027
Butter, pounds.....	400,509,854
Cheese, do.....	105,875,135
Hay, tons.....	19,129,128
Clover seed, bushel.....	929 0 0
Grass seed, bushel.....	900,286
Hemp, dew rotted, tons.....	83,247
Hemp, water rotted, tons.....	3,943
Hemp, other prepared, do.....	17,800
Hops, lbs.....	11,010,012
Flax, lbs.....	3,783,079
Silk cocoons, lb.....	6,562
Maple sugar, lbs.....	38,863,884
Cane sugar, bbls, 1000 lbs.....	302,205
Cane molasses, gallons.....	16,337,000
Sorghum molasses, do.....	7,335,025
Maple molasses, do.....	1,944,594
Beeswax and honey, lbs.....	26,386,455
Value of home-made manufactures, dollars.....	24,358,222
Value of cotton goods produced in the year ending June 1, 1860, do.....	115,137,921
Value of woollen goods produced, do.....	68,765,968
Leather produced, do.....	63,000,751

Boots and shoes manufactured in the year ending June 1, 1860, do.....	89,540,900
Value of animals slaughtered, do.....	212,871,053
Number of horses.....	7,300,972
Number of asses and mules.....	1,296,339
Number of sheep.....	24,823,566
Number of neat cattle.....	28,987,346
Number of swine.....	36,032,276
Agricultural implements produced in the United States, do.....	17,802,514
Value of sewing machines, do.....	5,605,345
Number of patents issued for improvements and inventions in agriculture in 1861.....	521
Newspapers and periodicals, 1860.....	4,051
Value of steam engines and machinery, do.....	47,118,550

MINERAL PRODUCTS, &c.

Gold from California in the year 1859, dollars.....	47,744,462
Silver coined at Mint, dollars.....	610,011
Quicksilver, flasks.....	45,023
Quicksilver, value of, dollars.....	2,000,000
Copper, tons.....	14,432
Copper, value of, dollars.....	3,316,516
Pig iron, tons.....	884,474
Pig iron, value of, do.....	19,487,790
Zinc, tons.....	11,800
Zinc, value of, dollars.....	72,000
Lead, value of, dollars.....	977,281
Nickel, tons.....	2,348
Nickel, value of, dollars.....	28,176
Coal, anthracite, tons.....	9,289,330
Coal, bituminous tons.....	5,775,077
Coal, value of, dollars.....	19,365,765
Area of coal in United States, sq. miles.....	200,000
Coal oil, bbls.....	1,092,450
Coal oil, value of, dollars.....	1,092,450
Coal oil, daily flow from wells in Pennsylvania, bbls.....	5,747
Salt, value of manufactured in the United States, 1860, dollars.....	2,265,392

FISCAL RESOURCES, NATIONAL DEBT, &c.

Aggregate value of imports in the year 1860, dollars.....	334,350,453
Aggregate value of exports, do.....	218,515,454
Value of imports under the reciprocity treaty, dollars.....	50,019,427
Tonnage of the United States, tons.....	5,539,813
Tonnage, value of, dollars.....	221,592,692
Indirect trade, do.....	34,224,444
Fisheries, the products of 1860, dollars.....	12,924,092
Excess of specie and bullion imports over exports, dollars.....	16,548,531
Revenue from customs and public lands.....	40,452,784
Total of the nation debt, Dec. 1, 1861, dollars.....	267,540,035
Estimated quantity of coin in the United States \$275,000,000 to.....	300,000,000
Number of banks.....	1,642
Bank capital, dollars.....	424,890,095
Circulation of banks, dollars.....	207,102,477
Spirituous liquors distilled, gals.....	88,002,983
Spirituous liquors, value of, gal.....	24,253,176
Malt liquors, brewed, bbls.....	3,230,545
Malt liquors, value of, dollars.....	18,001,135

RAILROADS, &c.

Aggregate length of railroads in 1860, miles.....	31,1961
Cost of construction, dollars.....	1,166,422,729
City passenger railroads, miles.....	402
Cost of construction, dollars.....	14,862,840
Length of internal navigation, miles.....	30,000
Length of lines of telegraph, do.....	40,000
By an act of Congress, July 1, 1862, a charter was granted to the Atlantic and Pacific Railroad Company, with a capital of, do.....	100,000,000
For the construction of a railroad, with branches from the Mississippi river to the Pacific ocean, about, miles.....	1,800
In aid of this colossal enterprise, Congress has made a very liberal donation, by grants of public lands lying on the route, and a loan of thirty years six per cent United States bonds, to the amount of about, dollars.....	60,000,000

FINANCES OF KENTUCKY.

The public debt of this State on the 10th of October, 1862, is given in the report of the State Auditor as follows:

STATE DEBT.

The entire debt of the State on the 10th of October, 1862.....	\$6,205,234 03
Of this amount there was owing to individuals, banks and other corporations.....	\$3,338,402 00
To the Board of Education.....	1,81,832 03
To the banks of Kentucky for military loan.....	1,485,000 00 — 6,205,234 03

For the payment of this debt the sinking fund receives annually a tax from the banks and dividends on the stock owned in the same, dividends on the stock in turnpike roads and railroads, 10 cents on each \$100 worth of property listed on taxation, taxes on brokers and

RAILROAD SHARE AND BOND LIST,

CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	48													
Baltimore and Ohio.....	Md.	100	380	13,111,800	10,781,833	566,075	3,922,203	2,305,788	Sept. 30, 1860	Maryland Sterling Mortgage.....	3,000,000	5			
do do										"	2,500,000	6	100	1885	
do do										"	700,000	6		1880	
do do										"	1,125,500	6	102	1875	
do Washington Branch.....	Md.	30		1,650,000						"	1,000,000	6	103	1867	
Bellefontaine and Indiana.....	Ohio & Ind.	118		1,859,813	1,256,750	139,120	314,090	8,795	Dec. 1860.	1st Mortgage.....	791,000	7	55	1865	
do do										2d "	160,000	7		1870	
Buffalo and State Line.....	N.Y. & Pa.	60	68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000			1864	
Camden and Amboy.....	N. J.	138	96	3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	377,000	6	100	1861	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st Mortgage.....	800,000	7		1864	
do do										2d "	801,000	7	76	1865	
do do										3d "	950,000	7		1865	
do do										4th " S. F.	1,365,800	7		1870	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	7	106	1865 & 1870	
do do										2d "	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	85	222	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,400,000	7			
do do										2d "	1,535,000	7			
do do										3d "	1,000,000	10			
Chicago and Milwaukee.....	Wis.			No report	received.					1st Mortgage.....	400,000				
do do										2d "	200,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	104		2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref. 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	101	Feb. & Aug. 1	
do do										2d "	3,600,000	7	72	Feb. & Aug. 1	
do do										2d "	2,000,000	6	41	May 1.	
Chicago and Rock Island.....	Ills.	95	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	118	1870	
Chicago, Burlington and Quincy.....	"	110	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	125	1863	
do do										" 2d " S. F.	813,000	8	118	1890	
do do										1st Mor. Chi. & Aur.	399,000	7		1867	
do do										2d "	303,000	7		1869	
do do										1st "Cent. Mil. Tract	392,000	7		1864	
do do										2d "	245,000	8		1868	
Chicago, Iowa and Nebraska.....		82		No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	125	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d "	950,000	7	100	1880	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,301,000				
do do										2d "	532,000				
do do										3d "	104,000				
Cleveland and Mahoning	Ohio.	68		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	Income.....	305,509				
do do										1st Mortgage.....	850,000	7	80		
do do										2d "	469,000	7			
do do										3d "	341,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	72	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	106	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7	102	1873	
do do										3d 2d Ex.....	1,165,000	7	100	1865	
do do										4th 3d Ex.....	1,154,000	7	82		
Cleveland and Toledo.....	Ohio.	94	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jan. 1st Div.	330,000	7	102	1867	
do do										1st " " 2d Div.	263,000	7		1872	
do do										2d "	265,000	7		1862	
do do										1st " Tol. Nor. & Clev	521,000	7		1863	
do do										2d "	293,300	7		1864	
do do										Junction Income..	44,500	7		1862	
do do										C. & T. Income..	300,000	7		1864	
Cleveland, Columbus and Cincinnati.	Ohio.	165	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	165	98	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	106	1861	
do do										2d "	303,000	7		1862	
Columbus and Xenia.....	Ohio.	115	54	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700		100	1860 to 1866	
Columbus, Piqua and Indiana.....	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"	142		2,176,666	2,512,000	292,267	375,002	212,107		2d "	2,212,000	8			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,025	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	50		
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000	7	90	1875	
do do										2d "	1,060,900	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	798,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		966,061	1,219,100	249,668	124,140								
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	400,000				
do do										2d "	184,000				
Galena and Chicago Union.....	Ills.	96	121	6,028,300	3,524,200	none	1,462,752	652,960	Dec. 31, 1860.	1st Mortgage.....	1,993,000		104	1862 & 1863	
do do										2d "	1,520,000		100	May 1, 1875	
Great Western	Ills.	175		1,000,000	2,391,000		435,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report										
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573		Land Mortgage ...	5,000,000				
Hannibal and St. Joseph.....	Mo.	206		1,041,086	10,354,000	220,336	996,907	512,933	Sept. 1, 1860.	Mortgage Conv.....	1,354,000		64		
do do										at Mortgage.....	927,000	6		1873	
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1861	1st Mortgage.....	4,000,000	7	118	1869 & 1870	
Hudson River	N. Y.	97	144	3,758,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	2d S. F.	2,000,000	7	114	1870	
do do										3d "	1,840,000	7	101	1875	
Illinois Central.....	Ills.	96	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	38,000	7	123	1869	
do do										Construction.....	12,885,000	7	115	1875	
do do										"	4,115,000	6	100	1875	
do do										Debentures.....	42,740	7	100		
Indiana Central.....	Ind.	72		611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	600,000	7			
do do										2d "	578,000	10			
do do										Income.....	38,700	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000	7		1866	
do do										2d "	400,000	7	90		
do do										Real Estate Mort...	200,000	7	90		
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	1st Mortgage.....	649,984				
do do										2d "	314,000				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report								
Iron.....	Ohio.	13		118,865	50,000		No report								

CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock.	Loan of R. D.	Capital paid in.	Total Fund ed Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.	
Iron Mountain.....	Mo.		86 1/2	\$ 1,970,037	\$ 3,501,000	43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000					
Jeffersonville.....	Ind.			1,015,007	681,000		302,006	122,797	Dec. 31, 1860.	1st	229,000	7	75	1861		
do										2d	302,000	7	70	1873		
Kentucky Central (Covington and Lexington).....	Ky.		90	Sold out under mortgage	2,930,000	337,632	426,408	227,534		1st Mortgage.....	160,000	6				
do										1st	260,000	7				
do										2d " Conv.	1,000,000	7				
do										3d	600,000	7				
La Crosse and Milwaukee.....	Wis.		200	In hands of Receiver.						1st Mortgage E. D.	900,000		89			
do										2d " E. D.	1,000,000					
do										1st Land Grant W.D.	4,000,000		21			
Lafayette and Indianapolis.....	Ind.		64	1,000,000	600,000		No report		June 30, 1861	1st Mortgage.....	130,000	6				
Lexington and Frankfort.....	Ky.		29	514,433	130,000		108,944	43,267	Jan. 1, 1862	1st Mortgage.....	1,300,000	6		1863		
Little Miami.....	Ohio.		65				1,330,050	529,981	June 30, 1861	City Loan.....	174,000					
Louisville and Frankfort.....	Ky.		65	1,169,59	384,519		243,910	98,679		1st Mortgage.....	248,000					
do										1st Mortgage.....	2,000,000	7				
Louisville and Nashville.....	Ky.		268	5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000					
do										1st " Memphis Br.	500,000					
Louisville, New Albany and Chicago..	Ind.		288	2,800,000	3,000,000	200,000	645,827	371,402								
do																
Madison and Indianapolis.....	Ind.		87	1,648,050	1,285,300	87,969	230,503	99,030	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861		
Marion and Cincinnati.....	Ohio.		208	8,561,213	196,408	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv.	2,500,000	7		1868		
do										2d "	2,000,000	7				
do										3d "	1,500,000	7				
do										Sterling Income...	333,000	4				
do										Domestic	928,617					
Michigan Central.....	Mich.		97	284	6,057,784	7,968,489	125,000	2,126,099	910,169	May 31, 1861	1st Mortg? Sterling	467,483	6	98 1/2	1872	
do										1st " Conv.	500,000	8	84	1869		
do										1st " unconv.	250,000	8	96	1860		
do										1st " Dollar Conv.	2,598,000	8	128	1869		
do										1st " S. F. Conv.	4,153,000	8	108	1862		
Michigan South'n & North'n Indiana	Mich &		64	246	9,018,200	9,714,704	437,886	2,075,459	1,039,820	Mar. 31, 1861.	Mort. Mich. So.	991,000		103	1860	
do	Guaranteed		104							" Nor. Ind.	985,000		100	100	1861	
do										" Goshen Line.	1,168,000		112	100	1863	
do										S. F. Toledo	2,850,000		112	103	1865	
do										2d Mortgage	2,465,000		103		1877	
Milwaukee and Chicago.....	Wis.		40	1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8				
do										2d	200,000	7				
Milwaukee and Horicon.....	Wis.		42	1,101,200						1st Mortgage.....	420,000	8				
do										2d	600,000	8				
Milwaukee and Prairie du Chien.....	Wis.		45	1,944,000	2,556,000		883,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	111	1891		
Milwaukee and Western.....	Wis.		71	No report												
Mississippi and Missouri.....	Iowa,		55	No report						1st Mortgage Conv.	1,000,000	7	66			
do										2d " S. F.	400,000	8				
do										Oskaloosa Div.	1,425,000	7				
do										Land Grant.....	7,000,000	7				
New Jersey.....	N. J.		34	4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000		109			
New Jersey Central.....	N. J.		155	64	2,200,000	3,186,000	175,000	1,185,847	Dec. 31, 1860.							
New York and Erie Pref.....	N. Y.		106	Sold under mortgage			5,590,916	1,979,408	Sept. 30, 1860.	1st Mortgage.....	3,000,000		106			
do	do common, ..		79							2d	4,000,000		111			
do										3d	600,000		107			
do										4th	4,900,000		111			
do										5th	1,792,500		107			
New York and Harlem Pref	Conn.		77	138	5,717,190	6,055,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,950,000	7	109 1/2	1873	
do common										2d	1,000,000	7	105	1864		
New York and New Haven.....	Conn.		39		3,000,000	1,990,000	108,038	925,075	323,573	Apr. 1, 1861.	Mortgage.....	912,000	7	94	Dec. 1, 1866	
do												6		Oct. 1, 1875		
New York Central.....	N. Y.		120	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H.	7,925,000	6	105	May 1, 1863	
do										Mortgage.....	3,000,000	6	118	June 15, 1864		
Northern Central.....	Md.		50	138	2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,066,500	6		1865	
North Missouri.....	Mo.				2,423,736	4,350,000	93,796	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6				
Ohio and Mississippi, Eastern Div....	Ohio & Ind		192		Leased.	9,880,000	2,330,030	896,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500	6			
do										3d	316,995					
do										Construction.....	4,637,920					
do										Income.....	3,591,185					
Ohio and Mississippi, Western Div....	Ills.		148		.....	3,292,403		No report		State Loan.....	7,000,000	6				
Pacific.....	Mo.				3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W....	2,800,000	6			
do										Construction.....	4,500,000	6	104 1/2	1888		
Pennsylvania.....	Pa.		339		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,900,000	6	98 1/2	1875	
do										2d	2,319,000	6				
do										2d " Sterling.	1,957,410	6	80	1875		
do										State Works.....	7,200,000	5				
Pertu and Indianapolis.....	Ind.		74		1,100,000	820,000	80,000	No report								
Philadelphia, W. and Baltimore.....	Del.		50	98	5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6	99 1/2	1884	
do										Improvement.....	119,000	6		1863		
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.		73	467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	1st Mort. O. & P.	1,000,000	7	117 1/2	1865	
do										2d	750,000	7	103	1866		
do										1st " O. & I....	1,000,000	7		1872		
do										2d "	380,000	7		1873		
Pittsburgh and Connellsville.....	Pa.		49		1,755,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000				
Racine and Mississippi.....	Wis.		104		2,705,720	1,417,900	1,065,328	220,850	68,438	May 10, 1861.						
do																
Sandusky, Dayton and Cincinnati. .	Ohio.		170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1866	
do										"	997,000	7		1866		
do										"	1,000,000	7		1875		
Sandusky, Mansfield and Newark....	Ohio.		125		848,770	1,385,200	132,063	195,934	34,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1866	
Springfield and Hocking Valley.....	Ohio.		56		400,000	500,000	100,000	110,200	53,100							
Springfield, Mt. Vernon & Pittsburgh..	Ohio.		50		1,000,000	1,050,000	200,000			1st Mortgage.....	300,000					
do										2d	450,000					
Stevensville and Indiana..	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870		
do										2d	900,000	7		1865		
Terre Haute, Alton and St. Louis.....	Ills.		41	208	No report					1st Mortgage Conv.	1,000,000	7	108	1862		
do	Preferred		68							2d " Conv.	2,000,000	7	95	1863 & 1870		
do										1st " Bel. & Ill.	517,000	7		1873		
Terre Haute and Richmond.....	Ind.		105	73	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	200,000	7	106	1866	
Toledo, Wabash and Western.....	Ohio & Ind		80	243	2,123,506	5,996,649	52,289	233,546		1st Mortgage.....	3,400,000	7	98 1/2	Aug. 1, 1865		
do Preferred										2d	2,500,000	7	92	Nov. 1, 1878		
										Mort. Coupons....	96,449	7		1860 to 1865		

insurance companies, and the excess of revenue at the end of each year, over \$10,000.

The annual interest on the State debt amounts to \$343,847 22. This includes the interest on the military loan, amounting to \$89,100.

The State owns stocks in internal improvements, the present value of which is uncertain, amounting in the aggregate to..... \$4,830,475 00
In banks and railroads..... 2,162,819 50
And the sinking fund..... 1,108,976 95

Total..... \$8,102,271 45

In 1861 the total valuation of property in this State was \$468,863,622. In 1862 the total valuation was \$355,481,423, showing a reduction in valuation of \$113,381,199, which is 24½ per cent of the whole valuation of the State.

The total amount in the treasury on October 10th, 1862, was \$459,708 50, which was divided as follows:

Revenue proper..... \$ 58,980 79
Sinking Fund proper..... 200,776 50
School Fund proper..... 140,843 82
Military Fund..... 58,327 08
Enrolled Militia Fund..... 780 11

Total..... \$459,708 30

REVENUE PROPER.

The total receipts of the year ending 10th October, 1862, amounted to.... \$358,937 99
To which add balance remaining in the treasury on the 10th October, 1861..... 7,153 10

Making..... \$566,091 09
The total expenses for the time amounted to... 507,110 30

Leaving a balance in the treasury on the 10th of October, 1862, of..... 58,980 79
Debts due and outstanding, 10th October, 1862, amounted to..... 810,390 74

Making a total of..... \$869,371 53
The amount of debts due by revenue proper on 10th October, 1862, was..... 476,667 32

Leaving a balance in favor of the revenue proper, on that day, of..... \$392,704 21

CITY RAILROAD.—The following are the reports of the Eighth and Ninth Avenue City Railroads of New York City:

SECOND AVENUE.

Capital stock, per charter..... \$800,000 00
Amount paid in..... 650,000 09
Funded debt..... 450,000 00
Floating debt..... 42,500 00

Total cost of road and equipment..... \$1,101,872 97
Number of passengers carried in cars..... 4,771,119

Expenses of maintaining the road..... \$3,688 34
Horse-shoeing, harness etc..... 9,941 07
Expenses of operating the road..... 177,937 79
Interest..... 37,629 26
Payment to surplus fund..... 13,869 27

Receipts..... \$243,065 73

THIRD AVENUE.

Capital stock paid in..... \$1,170,000 00
Funded debt..... 400,000 00

Cost of road and equipment..... \$1,757,028 97
Number of passengers carried in cars..... 11,432,392

Expenses of maintaining the road..... \$21,591 64
operating the road..... 347,205 90
Interest..... 26,086 94
Dividends..... 140,400 00
Receipts..... \$580,736 17

SIXTH AVENUE.

Capital stock as by charter..... \$750,000 00
Amount paid in..... 750,000 00
Funded debt..... 25,000 00

Cost of road and equipment..... \$1,089,316 90
No. of passengers carried in cars..... 6,955,647

Expenses of maintaining the road, including real estate purchased..... \$54,269 62
Repairs..... 13,794 91
Expenses of operating the road..... 201,603 45
Paid dividends..... 75,000 90
Receipts..... \$386,915 14

EIGHTH AVENUE.

Capital Stock paid in..... \$800,000 00
Floating debt..... 25,000 00
Cost of road and equipment..... 938,364 99
Number of passengers carried in cars..... 7,399,696
Expenses of maintaining the road..... \$13,107 61
Expenses of repairs..... 11,036 77
Expenses of operating the road..... 106,517 29
Dividends..... 90,000 00
Receipts..... 390,984 81
Total transportation expenses..... 248,419 85

NINTH AVENUE.

Capital stock, by charter..... \$800,000 00
Amount paid in..... 795,300 00
Funded debt..... 92,000 00
Cost of road and equipment..... 416,774 41
Number of passengers carried in cars..... 1,769,963
Expenses of maintaining the road..... \$6,060 30
Repairs of cars..... 3,907 20
Operating the road..... 33,038 84
Interest..... 1,473 61
Receipts..... 89,498 19
Total transportation expenses..... 70,068 75

ERIE RAILWAY Co.—The directors of this company, on the 22nd instant, declared a dividend of 5 per cent on the preferred stock of the company, payable Feb. 19. The transfer books close Jan. 31. The earnings of the road for the year ending Sept. 30, 1862, were as follows:

EARNINGS.

Passengers..... \$1,096,196 60
Freight..... 6,642,914 68
Other sources..... 124,661 40

Total..... \$7,863,972 68

EXPENSES.

Transportation expenses..... \$4,391,393 89
Interest..... 1,577,980 47
Taxes, rents, ferry etc..... 479,036 73

Total..... \$6,448,411 09

Leaving as net earnings for the year \$1,415,561 59. It is understood that a large proportion of this amount has been expended in permanent improvements to the track, payments of assessment scrip and overdue coupons. The amount divided is 5 per cent on the preferred stock, \$8,973,000, which amounts to \$438,650.

The earnings of the Panama Road in November were \$128,886 98.

The earnings of the St. Louis, Alton and Terre Haute Railroad Co. in December show a very favorable result:

	1862.	1861
From passengers.....	\$29,387 29	\$20,522 95
From freight, &c.....	106,128 73	55,162 50
Total.....	\$135,516 02	\$75,685 45
Increase.....	\$59,930 37	

The earnings of the last week of the month were \$51,489, against \$25,096 last year. The aggregate earnings for the

year ending December 30 were..... \$1,117,603 41
1861..... 762,997 45

Increase nearly 50 per cent..... \$354,605 96

The operating expenses do not show any important increase under the enlarged earnings, having been only \$549,583 47 against \$533,493 12. The net earnings are:

Gross earnings..... \$1,117,603 41
Expenses..... 549,583 47

Net earnings..... \$568,019 94

ILLINOIS CENTRAL LANDS.—The sales in the Land Department of the Illinois Central Railroad for last week, footed up to \$53,000. There were 62 purchasers, who will at once settle upon the purchased property, and put it in a state of cultivation.

MONETARY & COMMERCIAL.

The past week has been no exception to the feverish and excited condition of the money market noticed in our late issues. The course of speculation in coin has been the leading feature of interest, and many have been the learned discussions with regard to its rise or fall. Our own bankers and operators have been contented hitherto to follow eastern quotations, keeping within safe bounds, without attempting to make rates according to their own ideas. They generally follow a safe plan, and make two to three per cent greater difference between buying and selling rates than the differences established at the east. Whatever may be claimed to be the reason for the high premium on gold, it is quite certain that it is not the absolute scarcity of the article itself which causes it. It is true it has been withdrawn, in a great measure, from circulation; but this is the effect of hoarding consequent upon supposed greater value. In 1849 we were supposed to have in the country a total of coin of \$122,000,000. Since that period it is estimated we have received from California \$1,047,000,000, and from other sources in the United States \$56,000,000; and it is shown that we have also imported \$107,000,000, and received from emigrants \$108,000,000 more; making in all \$1,440,000,000. Of this enormous amount, we have exported \$668,000,000, and probably lost by wear of coin, ship-wreck, fire, etc., \$56,000,000. Which would leave us a balance of \$716,000,000 still in the country, or nearly six times the amount we had in 1849. The cause of the high premium, therefore, is not the scarcity of the article. Neither can it be the scarcity of coin in the hands of bankers, for the bankers of New York City alone, hold on an average \$30,000,000 of coin in their vaults. On January 17, these banks held \$37,581,465. Those of Boston held \$7,710,636; and those of Philadelphia \$4,549,368, making a total of \$49,841,469 against \$40,439,595 of the same period last year. The premium, therefore, is not due to scarcity of coin. Much of it is, however, due to a state of war and lack of confidence; and probably much more to a spirit of speculation, which now runs rampant in the country, and which will surely lead to a future revulsion.

Our stock tables, for some time past, have shown a steady and wonderful increase in quotations. The past week has shown a turn in the scale. The operators of Wall street, after running up every security, good or bad, to the highest figures which it seemed possible for them to reach, quietly stepped aside and left the market in the hands of the outside dupes who were fools enough to enter the arena. The result is a general fall in stocks. It is quite probable that the market will recover again and that fluctuation will be the order of the day until outsiders are pretty thor-

oughly fleeced or convinced of the uncertainty of stock speculations.

One of the leading measures now before Congress, is the bill providing for an additional issue of Treasury notes and bonds of the government for the purpose of carrying on the war. The same bill also provides for the issue of fractional currency and for taxing the issues of bank notes when they exceed a certain per centage of the paid up capital of the banks.

Exchange has been in better demand this week, but quotations do not vary much. We quote as follows:

The demand for money on loans has been light, and the banks readily take all the good paper offered at 10@12 per cent. Many transactions are made at lower rates. It is exceedingly difficult to find good mortgage security at 10 per cent, 6@8 being the current rates for first class mortgages.

General business has been fair. In dry goods a good business has been done. Purchasers are in the market early, fearing further advances in prices. Flour and wheat have been in large demand for speculative purposes. We quote superfine at \$5.75@5.85. Family, \$6.00 firm. Wheat, prime red \$1.18@1.20; choice white Ohio and Indiana \$1.20; and \$1.25 for choice Kentucky white. Corn is scarce at 50@51c in bulk and 59@61c in sacks. Oats are in fair demand at an average of 65c in sacks. Rye was firm at 85@87 cents. Barley 1.15@1.20 for Spring and \$1.30@1.35 for Fall. Whisky is 43c.

The provision market has been dull. The receipts of hogs for two weeks past have been 21,181. Prices range from \$4.50@5.25. Mess pork sells at \$11.00@11.50 for old country. New country \$13.00 and city \$13.50.

	BUYING.	SELLING.
New York.....	1-5	par.
Philadelphia.....	1-5	par.
Boston.....	1-5	par.
Gold.....	48@50 prem.	53@55 prem.
Silver.....	33@35	"
Demond Notes.....	45	"

—The Michigan Central Road earned the second week in January:

1862.....	\$56,286
1863.....	47,269
Decrease.....	\$9,617

—The Galena and Chicago Road earned in the same week:

1862.....	\$26,731
1863.....	32,014
Increase.....	\$ 5,281

The Michigan Southern Railroad earned the second week of January:

1862.....	\$32,532
1863.....	56,829
Increase.....	\$24,295

—The Chicago and Rock Island Railroad earned the second week in January:

1862.....	\$22,774
1863.....	34,332
Increase.....	\$11,558

—The report of the Brooklyn City Railroad for the year ending Sept, is:

Capital stock paid in.....	\$1,000,000
Funded debt.....	170,000
Floating debt.....	10,000
Cost of road and equipment.....	\$1,332,55 59
Number of passenger carried in cars.....	9,983,504
Expenses of maintaining the road.....	\$10,961 96
Expenses of operating the road.....	362,277 10
Interest.....	14,574 99
Dividend (8 per cent).....	90,000 00
Receipts.....	\$491,629 31

The Chicago, Alton & St. Louis Railroad Company earned for the week ending Jan. 14 1863:

	1863.	1862
Passengers.....	\$ 9,345 50	\$ 6,341 06
Freight.....	12,642 09	10,057 83
Sundries.....	885 33	855 73
Total.....	\$22,873 92	\$17,254 62
Increase in 1863.....	5,618 30	

Total this month to date.....\$40,002 10 \$32,807 18

The Milwaukee and Prairie du Chien Railroad earned in the second week of January:

1862.....	\$26,559 50
1863.....	14,341 22
Decrease.....	\$12,098 28

The Illinois Central earnings in January show an increase of \$35,000 the first half of the month. The land sales of the company are very heavy.

The receipts on the Grand Trunk Railway for the

Week ending Jan. 10, were.....	\$50,493 25
Corresponding week last year.....	\$5,632 31
Decrease.....	\$5,149 06

The transfer books of the New York Central Railroad will close, for the semi-annual dividend of 3½ per cent, on Saturday the 31st inst., and re-open on the morning of Monday, Feb. 23.

The New York and New Haven Railroad Company has declared a dividend of \$3 per share, free from Government tax, payable February 2d. The transfer books close on the 24th inst. till February 2d, inclusive.

—The business of the Pittsburgh, Fort Wayne and Chicago Railroad for the ten months ending October 31, 1862, was as follows:

Freight.....	\$1,913,816 36
Express.....	26,000 00
Passengers.....	901,924 04
Mail.....	78,210 00
Rents.....	2,333 12
Rent of railway.....	70,833 32
Miscellaneous.....	6,916 16

Total.....\$3,009,993 50
The expenses for operating the road for the same period have been.....1,550,584 37

Leaving a net profit on the working of the line for ten months of.....1,459,459 00
Deduct interest.....760,000 00

Net earnings.....\$699,459 00

equal to 13 per cent dividend on the capital stock for ten months.

—The earnings of the Chicago, Burlington and Quincy Railway Company for the

Six months ending Dec. 1, 1862, were.....	\$1,189,947 92
Less operating expenses, interest &c.....	721,978 79
Net.....	\$467,969 13

or more than 8 per cent on the increased capital of \$5,738,440. If the net earnings of the current six months are half as large, the year's

business will show over 12 per cent net for the stock. In December the gain was \$55,000 over the corresponding month of 1861. The balance to the credit of income account Dec. 1 was \$652,926, or nearly 11 per cent on the stock. Of this, \$285,508 is invested in Sinking Fund Bonds.

—The Cleveland and Toledo Railroad earned:

1862.....	\$25,187
1863.....	35,204
Increase.....	\$10,017

—The coupons of the first mortgage bonds of the Central Ohio, overdue since November 1, 1859, will be paid at Zanesville, Ohio, by the Receiver.

—The Galena and Chicago Railroad Company gives notice that the time for extending its first mortgage bonds is limited to the first of April next. The coupons on the Preferred Sinking Fund bonds, Appleton Extension and Green Bay Extension bonds will be paid at the office, No. 12 Wall street, Feb. 2.

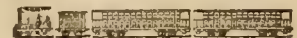
—The approximate earnings of the Pittsburgh, Fort Wayne and Chicago Railway during the month of December ultimo, compared with the same period of last year, were as follows:

	1862.	1861.	Increase.
Freight.....	\$249,660 81	\$211,925 62	\$37,735 17
Passengers.....	96,194 49	71,638 70	24,556 69
Express.....	7,106 77	2,600 00	4,506 79
Mails.....	7,825 00	7,825 00	.....
Rent of r'y.....	7,083 33	7,083 33	.....
Miscellaneous.....	966 49	866 20	80 29
Total.....	\$368,896 89	\$301,957 95	\$66,938 94
Earn'g from Jan. 1 to Nov. 30.....	\$3,374,327 02	2,729,829 56	644,497 46
Tot. to Dec. 31.....	\$3,743,223 91	3,031,787 51	711,436 40
Increase for December, 21 6-10 per cent; average increase to December 31, 23½ per cent.			

—The detail of the earnings of the Galena and Chicago Union Railroad for week ending Jan. 15, is:

	1862.	1863.	Inc.
Freight.....	\$20,997 31	\$24,594 00	\$3,600 69
Passengers.....	4,483 94	6,315 84	1,831 90
Mails &c.....	1,250 00	1,100 00	150 00
Total.....	\$26,731 25	\$32,013 84	\$5,282 59

Cincinnati and Chicago Air-Line



RAILROAD.

Opened for Business May 13, 1861!

Through Distance 280 Miles;
42 Miles Shorter than any other Route

NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C. H. and D. Depot, at 8:00 A. M. 7:00 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnet House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run direct through to Chicago without rebilling or transhipment.

JOHN BRANT, Jr., Superintendent
C. E. FOLLETT,
General Ticket Agent, Richmond, Ind.
S. W. CHAPMAN, Gen. Freight Agent.
3 Randolph Street, under Sherman House, Chicago, Ill

CAST STEEL WORKS. OF FRIED. KRUPP,

At ESSEN in Rhenish Prussia.

Patent Railway Tires, without a weld. Axles, Cannon, Anchor Flukes, Propeller Blades and Shafts. Cranked Axles and Shafts, up to Twenty Tons weight.

CAST STEEL IN BARS, BEST QUALITY,

Suitable for Axles, Shafts, Rolls, Tools, Dies, Needle and Music Wire, Fine Cutlery, &c,

KRUPP'S TIRES

Are cheaper at their cost than Iron ones gratis.

They will, without turning, entirely outwear the best Iron ones.

Wear uniformly, without flat places, or lamination.

Are not affected by extreme cold.

More than Forty Thousand of these Tires have been supplied.

KRUPP'S AXLES

Possess similar advantages over iron ones that the Tires do.

THOS. PROSSER & SON, 28 Platt St., N.Y.

SOLE REPRESENTATIVES IN AMERICA.

HOLENSHADE, MORRIS & CO.

MANUFACTURERS OF

Carriage, Tire, Machine, Plow, & all kinds of

SCREW BOLTS,

Nos. 535 & 537 Central Avenue,

CINCINNATI.

BRIDGE BOLTS, Rivets of all sizes, Coach Screws, and Thresher Teeth, made on short notice and on the most favorable terms. Nov 27, 1y

Philadelphia, Wilm'gton & Baltimore

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FOUR PASSENGER TRAINS DAILY!

RAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11, P. M., Express.

On Sundays at 3.30, A. M., and 11, P. M.

Leave Baltimore for the North and West daily, at 8.30; A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail, and 7.00 P. M., Express.

On Sundays at 7, P. M., only.

Through connections made for all points at the North, East and West.

WM. CRAWFORD, Agent.

KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

218 WALNUT ST., PHILADELPHIA.

(Two Premiums awarded by Franklin Institute.)

T. F. RANDOLPH & BRO.

Mathematical Instrument Makers

No. 67 West 6th St. bet Walnut & Vine,
CINCINNATI O.

CHICAGO, GREAT WESTERN AND
NORTH-WESTERN LINE—INDIANA.
POLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS.

CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—5:00 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—12:45 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.

Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—5:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains or line, and run through to Chicago without change of cars.

Be sure you are in the **RIGHT TICKET OFFICE** before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omnibuses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.

W. H. L. NOBLE,

General Ticket Agent.

C. R. COTTON, Cincinnati

J. T. CRAPSEY,

ATTORNEY AT LAW,

—OFFICE—

N. W. Cor. Walnut & Sixth Street,
CINCINNATI.

KNIGHT BROS. Consulting Engineers,

—AND—
COUNSELLORS

IN

PATENT CAUSES,

Solicitors of American and Foreign Patents.

Sprague's Bld'g.

OPP. POST OFFICE,

CINCINNATI, O.

W. M. F. HEWSON, STOCK BROKER,

No. 21 West Third Street,

CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and tax collection.

BUSH & LOBDELL. Chilled Railroad Car Wheel, Tyre,

—AND—

Railroad Machine Works,
Wilmington, Delaware,

MANUFACTURE

CHILLED WHEELS

—AND—

TYRES,

FOR RAILROAD CARS

AND

LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

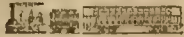
CELEBRATED WHEELS.

Either Single or Double Plate,
With or without Axles.

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To Hammered or Rolled A
In the best Manner, at the Shortest Notice,
Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition.

The well-earned reputation of this Road for
SPEED, SECURITY AND COMFORT
Will be more than sustained under the reorganization of its business.

In addition to the *Unequalled Attractions of Natural Scenery* heretofore conceded to this route, the recent *Troubles upon the Border* have associated numerous points on the road, between the Ohio River and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the *privilege of visiting WASHINGTON CITY en route*—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Bellaire, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

**NEW YORK, BOSTON,
AND ALL EASTERN CITIES,**

CARRYING THE

Gt. Western United States Mails.

Express Trains leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

The ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6. CHARLES MINOT, Gen'l Sup't

W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of
O. WASON & CO.)

CLEVELAND, OHIO,

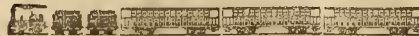
Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men the West that all work furnished by us shall be of the best quality in style, workmanship and material. Orders respectfully solicited, with the assurance that we will be prepared to give entire satisfaction.

1862. 1862. Pennsylvania Central R. R. 285 MILES DOUBLE TRACK.



(With its Connections)
IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
(with close connections with Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (430 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

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BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE.

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

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By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.
D. A. STEWART, Freight Agent, Pittsburgh.
CLARKE & CO., Transfer Agents, Pittsburgh.
R. C. MELDRUM & CO., Madison, Indiana.
J. E. MOORE, Louisville, Ky.
W. W. AIKMAN & CO., Evansville, Ind.
R. F. SASS, St. Louis, Missouri.
CLARKE & CO., Chicago, Illinois.
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H. S. PIERCE & CO., Zanesville, Ohio.
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R. MCNEELY, Mayville, Ky.
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Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Allentown, Pa.
L. L. HOUSTON, Gen'l Ticket Agent, Philadelphia.
H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE.
Cincinnati Express.....	7:00 A. M.	9:20 P. M.
Mail and Express.....	8:30 A. M.	6:20 P. M.
Columbus Accommodation.....	4:00 P. M.	11:05 A. M.
Morrow Accommodation.....	6:00 P. M.	8:05 A. M.

Cincinnati Hamilton and Dayton RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Dayton and Sandusky Mail.....	7:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	7:00 A. M.	11:40 P. M.
Cin. & Chicago Air-Line Ex.....	8:00 A. M.	8:50 P. M.
Dayton and Richmond.....	3:15 P. M.	1:30 P. M.
Day., Toledo & Detroit Huntsville.....	5:20 P. M.	10:55 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	8:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:50 and
Eastern Night Express.....	10:00 P. M.	7:40 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Lafayette and Chicago Mail.....	5:00 A. M.	12:20 P. M.
Indianapolis and Terre Haute.....	5:00 A. M.	12:20 P. M.
Decatur, Springfield & Quincy.....	12:45 A. M.	4:45 P. M.
Chicago Night Express.....	5:00 P. M.	10:40 A. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY
For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE.
Louisville and St. Louis Mail.....	6:15 A. M.	10:00 P. M.
Louisville and St. Louis Night Ex.....	7:10 P. M.	7:20 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

General Ticket Agent L. M. & C. & X., and C. H. & D Railroads.

General Ticket Agent Indianapolis & Cincinnati Railroad.

General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

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MACHINERY,

OF EVERY DESCRIPTION.

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NEW YORK.

ALFRED BRIDGES.

JOEL

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.

Steel Wire and Whalebone Tube BRUSHES.
Artesian Oil and Salt WELL TUBING.
Lap-Welded Steel BOILER TUBES
Glass Enamelled Iron WATER PIPE
Wrought Iron STEAM PIPE.

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N. W. BALDWIN, MATHEW BAIRD.
M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.²
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of
LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned
THEODORE DEHON,
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EDWIN J. HORNER,
SUCCESSOR TO
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**LOCOMOTIVE & RAILROAD
CAR SPRING
MANUFACTURER,**
WILMINGTON, DELAWARE.

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being alike on BOTH SIDES, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.
feb 12. WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

—AND—

Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Spt. 2. MOSELEY & CO.

JAMES FOSTER, Jr. & CO.,
MATHEMATICAL AND PHILOSOPHICAL INSTRUMENT MAKERS,

S.W. CORNER FIFTH AND RACE,

Cincinnati, Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

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The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, FEBRUARY 5, 1863.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$5 Per Annum, in Advance.

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WRIGHTSON & CO.,
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Arrival and Departure of Trains.

Little Miami—	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	9.20 P. M.
Mail and Express.....	8.70 A. M.	6.20 P. M.
Columbus Accommodation.....	4.00 P. M.	11.05 A. M.
Narrow Accommodation.....	6.00 P. M.	8.05 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	8.00 A. M.	8.50 P. M.
Dayton & Sandusky.....	7.00 A. M.	6.45 P. M.
Dayton & Toledo.....	7.00 A. M.	11.40 P. M.
Dayton Accommodation.....	3.15 P. M.	1.30 P. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.55 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	8.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.50 A. M.
Eastern Night Express.....	10.00 P. M.	7.10 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	7.00 A. M.	6.45 P. M.
Edinburg Accommodation.....	5.20 P. M.	10.55 A. M.
Marion & Cincinnati—		
Mail.....	7.45 A. M.	5.35 P. M.
Accommodation.....	3.30 P. M.	9.55 A. M.
Ohio & Mississippi—		
Mail.....	6.15 A. M.	10.00 P. M.
Express.....	7.10 P. M.	7.20 A. M.
Indianapolis & Cincinnati—		
Mail.....	5.00 A. M.	12.20 A. M.
Chicago Express.....	5.00 P. M.	10.40 A. M.
Dayton & Michigan—		
Toledo, Detroit & Chicago Exp.....	7.00 A. M.	11.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.55 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	8.00 A. M.	8.50 P. M.
Night Express.....	7.00 P. M.	8.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	8.30 A. M.	6.45 P. M.
Accommodation.....	6.00 P. M.	8.20 A. M.
Kentucky Central— (City time.)		
First Train.....	6.45 A. M.	10.37 A. M.
Second Train.....	2.10 P. M.	6.30 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marietta & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

BANKS OF THE STATE OF NEW YORK.

According to the report of the Superintendent of the Bank Department of this State, the whole number of banks, banking associations, and individual bankers doing business within the State at the close of the fiscal year, was three hundred and five. There were, at the same period, in addition to this number, fifty three closing and insolvent banks, whose notes are in process of redemption.

Ten banking associations, with an aggregate capital of \$1,560,000, and six individual bankers, have deposited the requisite securities and commenced the business of banking during the last fiscal year. Four of the new associations were organized from incorporated banks whose charters expired during the last fiscal year. The Bank of Rome, Bank of Salina, and Essex County Bank, whose charters expired on the 1st of January, 1862, have not reorganized, and are closing business.

The amount of securities held in trust in the department on September 30, 1862, was \$36,642,310.95.

The amount of circulating notes issued and outstanding on the books of the department at the same period was \$42,239,836. Of this sum there was in the vaults of the banks, on the 27th of September, 1862, \$1,682,463, leaving in actual circulation \$37,557,373.

The actual circulation reported September 21, 1861, was \$28,015,748; showing an increase of \$9,541,625 during the year.

The total amount of New York State stock held in trust for all the banks, on the 1st of October, 1862, was \$19,022,890 10. Of which amount \$5,928,966 was held for banks in the city of New York, and \$13,093,924 10 for those in other sections of the State. The total amount of New York stock held December 1, 1862, was \$19,812,225 10, and of United States stock, at the same date, \$12,729,450.

There has been a decrease in the bonds and mortgages held as security, during the past year, of \$174,308; of Illinois stock, \$36,783 33. The Superintendent has caused all the Arkansas State stock held in trust in the department to be withdrawn. With the exception of \$414,466 57 Illinois and Michigan stock all the stock held in trust by this department has been issued under the authority of this State and of the United States.

At the commencement of the panic of 1857, the total circulation of all the banks of the State was \$32,396,692. In March, 1858, the circulation was reduced to \$22,710,158. In June, 1861, the actual circulation of the banks was \$25,517,151. In September, of the same year, it was \$28,015,748, and in December, when specie payments were suspended, it was \$30,553,025.

The Superintendent compares the condition of the banks at these two periods of suspension as follows:

In 1857, the temporary suspension of the banks was the result of a commercial revolution of this character. The banks suspended specie payments in October of that year. During the three months antecedent to the suspension, there was a contraction in the loans and discounts of \$20,000,000; a withdrawal of circulation of \$5,273,000; a diminution of deposits equal to \$20,811,000; a lessening in stocks of \$2,244,000; while the issues of the banks, immediately prior to suspension, amounted to \$27,122,904 of circulation, against \$14,321,599 of specie.

In 1861, the banks suspended on the 28th of December. During the previous quarter there had been an increase in loans and discounts (chiefly on Government security) of \$14,000,000; an increase in circulation of \$5,547,000; an increase in deposits of \$13,283,900; an increase in stocks of \$16,000,000; while the banks held at the time of suspension, \$29,102,715 in specie, against \$30,563,020 of circulation. He therefore argues that the suspension at this time was not the result of a want of confidence in the community in the financial stability of the banks; nor did it follow from any inability on the part of those institutions to meet the obligations growing out of their relations to the business public; but proceeds to show that it was a necessity growing out of the large loans made to the government at the time.

The report closes with a reference to Secretary Chase's proposed substitution of United States stocks as the basis for banking, in lieu of State stocks; which the Superintendent condemns as unjust both to the banks and to the State.

MILWAUKEE & NORTHERN ILLINOIS R. R.

We noticed in the Railroad Record recently a meeting of the business men of Milwaukee, to encourage the construction of the above railroad:

This line is located south-west from Milwaukee city, touching the villages of Waterford and Rochester; and at the villages of Burlington connecting with the Racine and Mississippi road. Ten miles south of that point it connects with the Kenosha, Rockford and Rock Island Road, and four miles south of that point is the terminus of the road at the State line, where it unites with the Elgin and State Line Road, which is now built and in operation to that point. The Racine and Mississippi Road is now completed to Savanna on the Mississippi river. The Kenosha Road is now completed to Rockford, and the freight from these two roads now reaches Milwaukee by a connection with the Chicago and Milwaukee Road at Racine and Kenosha. By the construction of this line of road 22 miles of distance is saved on all freight to and from Milwaukee over these two roads, and a line is furnished to the Elgin and State Line Road,

by which it can reach this market with the products of the country. The grading on this line is far advanced, and the parties having it in charge anticipate having the road completed for the business of next fall.

A glance at the map will show that it forms a very direct line from Milwaukee to the large extent of country lying south-east of it, comprising Southern Wisconsin, Northern Illinois and Iowa, and for trade and travel in this direction, this line has the advantage of a large amount of road already constructed. The length of the line is forty four miles. The following is a copy of the resolution adopted by the meeting:

On motion of C. T. Bradley, it was

Resolved, That we fully endorse the Milwaukee and Northern Illinois Railroad as one fully securing in its construction all the interests of the city in the south-west direction, opening to its trade a large and extended section of country, at the least possible cost; and commending itself to the business men and property owners of this city, as one which will be largely beneficial to the city, and remunerative to the subscribers.

The resolution was adopted unanimously.

At the annual meeting of the Stockholders of the Milwaukee and Northern Illinois Railroad Company, held at the office of the Company, Milwaukee, January 21st, the following named gentlemen were elected directors:

George Dyer, Wm. P. Young, Edward Roddis, O. E. Britt, C. G. Cotting, G. Pfister, P. Gardner, Philo Belden and A. Cooper.

The Board of Directors elected Philo Belden, *President* of the Company; Edward Roddis, *Vice President*; George Dyer, *Treasurer*, and Wm. G. Parsons, *Sec'y*.

NEW JERSEY R. R. & TRANSPORTATION CO.

The annual report of this company gives the following statement of its affairs on the first day of Jan., 1863:

CAPITAL ACCOUNT.

Capital stock.....	\$1,397,800 00
Funded debt, including \$485,000, the cost of the property and privileges purchased of the Jersey Associates.....	678,000 00
Profit and loss, being surplus earnings represented by permanent improvements and the property and cash stated below.....	\$436,312 88
Less amount paid for relaying road with new rails and other improvements.....	36,896 11
Dividend, 1st January, payable 1st February, 1863.....	219,867 50
	\$5,695,704 27

To balance this, the cost of graduation, masonry, bridges, superstructure, iron, passenger and freight stations, buildings and fixtures, engine and car houses, workshops, machinery and fixtures, engineering, land and land damages, was \$3,583,950.90. That of locomotives, tenders and snow-plows was \$168,175.09; and that of passenger, freight, and baggage cars was \$229,203.36. To this should be added the bridge, ferry, turnpike and other stocks, real estate, ferry boats, privileges and fixtures, including the property and fixtures purchas-

ed of the Jersey Associates for \$485,000 making \$1,397,974.41, and cash in bank and cash items, receivable on demand, \$316,400.51, making in all \$5,695,704.27, the total amount given above.

The receipts and expenses of the company for the year 1862 have been as follows:

RECEIPTS.	
From passengers.....	\$703,814 '2
From freight.....	110,392 94
From U. S. mail, rents, express freight and other sources....	206,879 09
	\$1,111,026 75
EXPENSES	
Maintaining railroad, bridges and buildings.....	76,628 06
Repairs of locomotives, cars and machinery.....	67,813 82
Fuel-cost and labor in preparing.....	79,129 78
Operating the road and transporting passengers and freight.....	224,499 31
Office expenses, salaries and contingencies.....	10,891 46
	\$458,962 43
	\$652,124 32
Interest on bonds.....	\$41,050 00
Transit duty on passengers and freight.....	22,818 73
State tax on capital stock.....	21,989 00
Government tax.....	14,617 79
Dividends in cash, August and February.....	439,770 00
Profit and loss to surplus earnings.....	111,578 80
	\$652,124 32

The total number of passengers carried on the road, not including commuters and free passengers was 2,394,625, of which number 432,711½ were through passengers; the balance were local. The company carried during the year in all, 110,215½ tons of freight, of which 4,202½ was carried the whole length of the road and the balance was local. The total number of miles run by all classes of trains was 512,349.

The total earnings of the present year as compared with those of 1861, show a gain of \$118,319.41. While the expenses show an increase of only \$46,176.20.

The proportion of earnings to expenses shows very favorably for this company, being only 41 per cent of the earnings. This speaks well for its management.

The officers of the company are:

John S. Darcy, *President*; H. J. Soutmayd, *Treasurer*, and F. Wolcott, *Jackson Supt.*

TERRE HAUTE & ALTON R. R.—There is a peculiarity in the character of the preferred stock of this Company. The dividend in it is secured by mortgage and is accumulative.

The following is printed upon the face of each certificate, showing that in case the earnings of any particular year shall be insufficient to meet the dividend, it must be paid whenever the Company has the means, and that if not so paid the Trustees of the Second Mortgage can sell out the road. This feature gives the Terre Haute Preferred stock an important element of value over other stocks of its class, in the case of which the dividend of any year being passed is forever lost to the stockholder:

This stock is entitled to dividends at the rate of 7 per cent per annum, payable annu-

ally on the 1st day of May in each year, out of the earnings of the company for each year ending on the 31st of December previous to said 1st of May, after satisfying the interest on its bonds, and the contributions to its sinking fund; and in case said dividends cannot be regularly earned and paid, as above stipulated, all arrears are to be paid as soon and as fast as the net income of the company will allow; and no dividend is to be made on the general stock of the company until all such arrears have been paid. This stock is convertible at any time but the holders into the general stock of the company, at par, but shall not be entitled to a dividend for any time on which the holder thereof has received a dividend on preferred stock. The priorities and guaranties of this stock are secured by the deed of trust, known as the second mortgage, and by the conveyance of Robert Bayard, Samuel J. Tilden, John G. Richardson, Joseph Tuckerman and Russell Sage to the said company.

PHILADELPHIA, WILMINGTON & BALTIMORE R. R. CO.

WILMINGTON, Jan., 12, 1863.

The following is a statement of the operations of the road for the year ending Oct. 31, 1862:

Earnings of the Philadelphia, Wilmington and Baltimore Railroad Company for the year ending Oct. 31, 1862:

From passengers.....	\$1,644,517 01
Freight and express.....	506,245 20
Rents.....	16,267 94
Mails and miscellaneous.....	54,752 62
Earnings of the New Castle and Frenchtown Line:	
From passengers.....	12,372 45
Freight and express.....	14,148 01
Rents, mails etc.....	862 35
Total earnings, both lines.....	\$2,349,065 88

Expenditures of the Philadelphia, Wilmington and Baltimore R. R. line:	
Interest on bonded debt, ground rents etc., less interest received.....	159,000 00
Operating expenses.....	681,964 82
Expenditures for new work and improvements including, new buildings new cars and engines, double track etc.....	329,341 53
Expenditures of the New Castle and Frenchtown line:	
For operating expenses, repairs of road and all other items excepting tax and bonus.....	16,993 13
Taxes and bonus to the State of Delaware and New Castle co.....	11,000 00

Total expenditures of both roads.....	\$1,189,299 49
Add loss incurred in lease of Del. R. R.....	22,137 48
And we have a grand total of all expenditures of moneys of.....	\$1,211,436 96
And we have a net revenue of.....	\$1,067,658 82
From this we have paid two dividends:	
One in April of 4 per cent.....	\$234,600 00
One in Oct of 5 per cent & N'tnal tax \$29,933 17—	\$513,633 17
Which, deducted from net revenue, leaves....	\$525,019 55
From this deduct appropriations appropriations to Sinking Fund, amounting in all to.....	43,666 67

And we have a surplus of.....	\$ 180,352 88
A large portion of this surplus is due from the U. S. Government.	
The total earnings of both lines for 1861 were.....	\$1,516,934 81
Expenditures of all kinds, and loss on Delaware Railroad.....	841,501 01
Leaving net revenue.....	\$ 675,433 80
From which deduct two dividends of 3 and 3 1-2 per cent.....	364,000 00
And appropriation to Sinking Fund.....	41,666 67
And there remains a surplus over every other item for the year.....	\$ 269,817 13

The enormous amount of freight, and increasing travel between California and Nevada Territory, together with the high cost of transportation, demand serious attention. The

practical solution of the difficulty is the early construction of a railroad.

Called upon by you to make an examination for railroad purposes of that portion of the Sierra Nevada between Slippery Ford, on the South Fork of the American River, and Carson Valley, in Nevada Territory, the following is offered as the result of our labors. It is to be understood that these examinations have in view the connection of the cities of Sacramento and San Francisco with Nevada Territory by railroad, by the way of the city of Placerville, and along the South Fork of the American River, to form, in fact, a link of the great Pacific Railroad.

The topographical features of the mountainous portion of the proposed route are such as to admit of the construction of that important work through the Sierra Nevada, with moderate gradients, by the shortest possible distance, and by a line almost free from snow.

The South Fork of the American River rises in the Sierra Nevada Mountains, latitude thirty eight degrees, fifty minutes north, and pursues a general westerly direction until its waters unite with those of the Sacramento River at Sacramento.

The sources of the most easterly branch of the South Fork is in the vicinity of Johnson's Pass, which has an altitude of six thousand, seven hundred and fifty-two feet above the sea. Through this Pass runs the main wagon road of the Sierra.

The Slippery Ford Branch of this stream enters it about six miles west of Johnson's Pass, at Slippery Ford. Taking its head in the Sierra, about six or eight miles north-westerly from its confluence, it runs nearly parallel with the axis of the range, and splitting it, and running through a deep and narrow gorge, for part of the distance, it leaves the higher peaks to the west; while on the east, between it and Lake Bigler, is the main divide, much lower and broken.

On the east side of the divide, four or five miles in a northerly direction from Slippery Ford, a stream rises which flows into Fallen Leaf Lake, and from thence into Lake Bigler, at its south-western extremity.

This stream, flowing through a gorge similar to the Slippery Ford branch of the American, cuts the eastern base of the mountain very deeply and at right angles with it, making the main ridge very narrow between the two streams.

Bigler Lake Valley, which lies east of the sources of the South Fork, is enclosed by a short range of mountains, which runs between it and Carson Valley. This range diverges from the main chain in the vicinity of the old Carson Pass, bearing to the east and north until it reaches the Truckee River. This stream, being the outlet of Lake Bigler, flows from the west side, about two-thirds the length of the Lake from the south end, breaks its way through a chain of mountains, in a north-westerly and northerly direction, for about fifteen miles, then running north-easterly for about the same distance; it finally changes its course to the east and enters the Great Basin.

The general altitude of the range between Carson and Lake Valley seems to be as high as the main range. Its crest, however, is pierced by several low gaps, the lowest of which is called the Walton Pass—having an altitude of six thousand four hundred and nineteen feet.

A line of railroad connecting Placerville with the Sacramento Valley has been carefully surveyed and found practicable, and a company organized under the general railroad law of the State for the prosecution of the work.

It is proposed to carry the line from Placerville, which is situated about two and one half miles south of the South Fork of the American River, along the left bank of that stream for a distance of about twenty-six miles, and then across the river to the right bank, and continue up along the same and into the gorge of the Slippery Ford Branch, until it reaches an altitude of five thousand nine hundred and sixty-six feet.

The distance of this point from Placerville is fifty three miles. The elevation of Placerville being eight hundred and fifty feet, the grades between the two places need not exceed eighty feet to the mile.

From this point in the gorge it is proposed to perforate the mountain with a tunnel in the north-easterly direction to the gorge on the east side, a distance of three and three-fourth miles in a direct line. From the head of the tunnel on the east side of the line will run along the spar on the south side of Fallen Leaf Lake, descending to Bigler Lake Valley, crossing it by a distance of about six miles, on a grade of fifty-six feet to the mile; then heading the south end of Lake Bigler and pursuing a general north-easterly direction for sixteen miles along the range lying on the east side of the Lake until it reaches Walton's Pass by an ascending grade of forty feet to the mile.

It is deemed advisable to penetrate this ridge to the East Fork of Clear Creek with a tunnel, which will be about four hundred yards in length, saving an altitude one hundred and fifty feet.

From Walton's Summit the line will descend into the Great Basin, along the north side of Clear Creek, bearing a little north of east, until it turns the dividing ridge between that stream and King's Canon (a creek flowing in a north-easterly direction, and through Carson City.) It will then cross the stream near its head waters, and taking its left bank, until it reaches the ridge between Washoe and Eagle Valley, at a distance of eighteen miles from Walton's Summit, and at an altitude of four thousand five hundred and ten feet. The gradients for the last division will be the heaviest on the whole line, being about ninety-seven feet to the mile. The examinations were carried no further than this point, it being a commanding position. The descent into the plains to Carson River being but a few hundred feet, distance can be obtained to make the gradients easterly very light, or the line can be carried to Virginia City with nearly equal facility.

From Placerville to the crossing of the South Fork of the American River, the proposed line will run for a considerable distance along the northern slope of a smooth ridge dividing the waters of Weber Creek and the South Fork.

After leaving the town the road will not cross any very deep ravines until it reaches the river.

The overlying formation for the first sixteen miles is slate, under which lies granite, the slate disappearing as the line approaches the river to the Great Basin, the formation adjacent to the line is granite of various degrees of hardness. Between the crossing of the South Fork and the west end of the main tunnel several large ravines are encountered, the principal of which will be crossed at their mouths but little below grade. The country from twelve miles above Placerville to Bigler Lake Valley is heavily covered with pitch-pine, spruce, sugar-pine and cedar, of the best quality; and in crossing the deep ravines,

timber structures can be temporarily substituted. Outside of the saving of cost in the construction of the road, the fine timber mentioned will furnish a large amount of lumber for the Sacramento Valley, and the revenue derived from its transportation will form a very important item in the receipts of the road.

The construction of the western tunnel, which will be the principal difficulty in this great work, can be prosecuted with facility and economy. The granite is solid, of medium hardness, and at each head is an unfailing stream of water which can be applied to furnish power for ventilating purposes, drilling rock and removing material, no shafting being required. Appliances of this general description are now successfully employed to accomplish these objects in the Mount Cenis tunnel (seven and six-tenths miles in length) on the line of the Lyons and Turin railway in Europe.

From the east head of the tunnel to Bigler Lake Valley, the ground is quite smooth and unbroken by ravines: but for one-third of the distance, the side slopes are steep.

Between Lake Valley and Walton's Summit, the ground is considerably broken by small gulches, but the side slopes for most of the distance are very gentle, and the rock soft and friable. The tunnel through the ridge to the east fork of Clear Creek will penetrate granite of softer quality than the large tunnel, but not soft enough to require lining.

On the east side of the ridge, for the remaining distance, the ground is very rough and broken; there are numerous gulches and two large ravines to cross, and the side slopes are very steep. The material to be removed is disintegrated granite, not difficult to work, there will necessarily be considerable curvature on this division, but curves of moderate radii can easily be obtained.

By the construction of the tunnel between Slippery Ford and Bigler Lake Valley, the deep snow which accumulates in all the passes of the middle and northern section of the Sierra is avoided, and also an elevation and depression of seven hundred and eighty-six feet, which would otherwise have to be overcome by high gradients. At Slippery Ford, near the west end of the main tunnel, the depth of snow at no time during the last season (which was an extraordinarily severe one) was more than six feet. In Bigler Lake Valley, the depth did not exceed four or five feet, and at the pass east of Lake Valley, and at Carson City, there was much less snow during the winter than in Lake Valley.

The report on the Pacific Railroad Surveys of Captain G. B. McClellan, (now Gen. McClellan) to the Hon. (?) Jefferson Davis, Secretary of War, presents a concise statement of the amount of obstruction occasioned by snow storms. He says:

SNOW.

"The roads of Massachusetts, with rare exceptions, find but little difficulty in clearing the track of snow in one day. They only fail to do so when the snow drifts badly, and packs hard. To open the road, from two to five engines are attached to each train, with a snow-plow in front. The train pushes through until stopped, when it backs off and again advances.

Snow to the depth of five or six feet as maximum, can be cleared in this manner. With higher plows an additional power, it is possible that slightly greater depths of light snow may be worked through.

Snow a foot deep does not present a very

great obstacle—that is to say, the train makes regular progress at reduced speed.

Embankments are far less obstructed than cuts.

Cuts of twenty feet deep, and upwards, are less obstructed than those of from five to ten feet.

Along side of cuts like the latter *snow fences* are used. There are board fences, about eight feet high, placed some eight feet back from the edge of the excavation.

Drifting snow obstructs a train far more than a settled fall; for when the engine is brought to a state of rest, and finds it necessary to "back" in order to obtain a new impetus, the snow blows in under the wheels, and sometimes "blocks" the train so that it can not move either way. In such cases a large manual force is necessary to clear all the wheels at once.

Men and shovels are always carried on the train when the fall of snow is great, in order partially to open heavy drifts, and to provide for the contingency of the train being blocked.

Freight trains should be discontinued until the road is opened: the work being done by passenger trains. Light dry snow is by no means so serious an obstacle as wet heavy snow, except in regard to its liability to drift.

In opening a road over heavy gradients, commence working from the summit.

When the snow opposes a considerable resistance, the engines use about double the usual quantity of fuel and water.

Snow-plows are generally of two sizes; the larger sizes are from nine to ten feet high, and about seven feet broad; the smaller are about four feet high by seven broad, and are sometimes of iron.

It is evident from the above extract, that on the proposed line the railroad can be kept in operation through the winter season with but little expense on account of snow.

It may be well to remark that the wagon road route by Placerville, Slippery Ford and Johnson's Pass, is the only one which has been kept open throughout the entire season. Indeed it is notorious that all the travel and freight between Sacramento Valley and Nevada Territory passes, during not less than four months in each year, over the route designated. The enormous profits realized by the proprietors of portions of the road between Placerville and Nevada Territory, would have induced rival lines through other passes connecting Sacramento Valley with the Territory to have kept their roads open, if it had been at all practicable.

The crossing of the spur of the Sierra Nevada lying east of Lake Bigler presents no serious difficulty, a tunnel of only four hundred yards in length being required.

The construction of the tunnel of three and three fourth miles in length through the main Sierra will occupy some years. But in the mean time a temporary road can be constructed over the mountain through Johnson's Pass, connecting with the main line near the terminus of the tunnel.

The following is the estimated cost of a single track railroad with necessary turnouts, side tracks, building and equipments, from the city of Placerville to a point on the dividing ridge between Washoe Lake and Carson River, north of Carson City, in the Territory of Nevada. Total length of road in round numbers is ninety-seven miles:

ESTIMATE.

From Placerville to Slippery Ford, 50 miles at \$80,000 per mile.....\$4,200,000
From Slippery Ford to Lake Valley, tunnel 19,

900 feet, at \$80 per foot lineal.....	1,584,000
Across Lake Valley to west end of tunnel thro' eastern spur, 22 miles, at \$80,000 per mile....	1,320,000
Tunnel through eastern spur, 1,200 feet, at \$50 per foot lineal.....	60,000
Thence to termination of survey, 18 miles, at \$100,000 per mile.....	1,800,000
Equipment, depot buildings, etc.....	800,000
Total cost.....	\$9,804,000

From the best information we can obtain, we believe the amount and cost of transportation of freight and passengers per annum between Sacramento Valley and Nevada Territory, is approximately as follows:

50,000 tons freight at \$100 per ton.....	\$7,000,000
26,500 passengers at \$39.....	1,095,000
Mails and express.....	125,000
	\$4,220,000

The business of Nevada Territory is merely in its infancy, less than four years having elapsed since the discovery of the first silver mines; and the operation of working the ores has scarcely been commenced.

There is already, however, a population of not less than 30,000 in the Territory, and the probability is that this number will be trebled before a railroad can be constructed.

The above statement shows the immense amount of travel and freight now crossing the mountains; indeed, we doubt whether any such amount has ever passed in the same time over any wagon road in any country.

It would be futile for us to give an estimate of the prospective business of the road, as the data on which any estimate could be based must be a business in an uncertain but unexampled proportion. It is evident that a railroad must be built without any delay across the Sierra Nevada, and we believe that the Placerville route is by far the best which can be obtained; that it should form a link of the great Continental Railroad, and receive the aid which Congress intended to bestow on that road through the mountainous section of California.

Respectfully submitted,
WM J. LEWIS,
FRANCIS A. BISHOP, } *Civil Engineers.*

HEAVY LOCOMOTIVES.

No absolute limit to the weight of a goods locomotive has yet been discovered. In the days of 35 lb. rails and four wheeled engines, 10 tons was a good—indeed, a large—weight. With 50 lb. to 60 lb. rails and six coupled wheels we soon worked up to 25 tons; and with still heavier rails the same style of engine has been increased in weight to 35 tons. Ten wheel tank engines, with 20 in. cylinders, 24 in. stroke, six coupled wheels and a bogie have been made in Manchester for the Bhoré Ghant incline of the great Indian Peninsula Railway, and these engines weigh, we believe, 45 tons. The Engerth engines (and there are many of them,) on the French lines, have their tenders so connected with them as to form component parts of their own structure; and the weight of the whole, on twelve wheels, is 63 French, or 62 English tons. These engines have 19 11-16 in. cylinders, 26 in. stroke, eight coupled wheels, and 2,324 square feet of heating surface. Messrs Koechlin and Co., of Mulhouse, have built still heavier engines of the same construction, for the Paris, Lyons and Mediterranean Railway, their weight, on twelve wheels, being 70 tons; and so far from protesting against the great weights already attained, engineers appear disposed to push on still further, and weights of 100 tons (engine and tender) are really not unlikely to be common after a while. The conditions which govern the weight of locomotives are the strength

of the permanent way and adaptation to curves. With heavy rails, steel faced, or "converted" by Mr. Dodds' process, and supported at short intervals by large sleepers, well ballasted, there would appear to be no great fear on the part of engineers to adopt a weight of 7 tons, or even eight tons on a wheel, although there are more who still hold to 6 tons as the maximum. The limit of weight upon a single wheel being settled, we have only to consider how many wheels may be coupled together, and, at the same time, run through such curves as the line may present, and we may thus determine the maximum permissible weight of the engine. There are objections to coupling more than three pairs of wheels together, and so there are, indeed, in the way of coupling even two pairs. Different pairs of wheels will not retain exactly the same diameter. The Americans, it is true, occasionally couple four pair of wheels together, but these wheels are generally of chilled cast iron, which wears but slowly, and the speed is always moderate. Even with ten wheel engines (six coupled wheels and a bogie) we have known the driving wheels to be worn 3-8 in. smaller in diameter than those behind them, thus causing a slip at each revolution, of nearly 1-2 in.; or with 4 ft. wheels, upwards of 40 ft. of slip per mile. In nearly all American ten wheel engines, it is the custom to give 1-8 in. greater diameter to the driving wheels, when newly turned, than to the wheels behind them, and with which they are coupled, or, more correctly, sextupled. This allowance is made with wrought iron tires. With steel tires, which are now admitted to have as much adhesion to the rail as wrought tires, a much less allowance for the greater wear of the driving wheels would suffice, if indeed any were necessary with steel tires. While we are upon the subject of coupling wheels together, we may observe that coupled wheels work all the better for having a complete system of compensating levers between all their springs; each wheel should be carefully counterweighted according to its own share of the total disturbing weight; the axle guards should be provided with adjusting wedges for taking up the wear of the boxes in the guards; a slight play should be allowed in all the coupling rod brasses, so that as one pair of wheels rises or falls, thus increasing the distance between its own centre and that of the next pair of wheels, the rods may not be strained; and, finally, each crank pin in the driving wheels should, in inside cylinder engines, coincide with the centres of the nearest crank instead of being placed 90 deg. from it. We hardly need discuss the advantages of compensating levers and counterweighting; the adjusting wedges, as used in the Paris and Orleans locomotive in the late Exhibition, and in all American locomotives, serve an excellent purpose both in adjusting the centres of the engine when new, and in taking up wear after use; and where the centres of the coupling rod pins and nearest cranks are coincident, there is no slipping of the trailing wheels, due to the wear in the coupling rod brasses, at the times when the latter are passing from the upper to the lower half of their revolution, and *vice versa*. With crank pins set at 90 deg. from the cranks, such slipping does take place whenever the coupling rod brasses become worn. All these details are of importance in the case of six or eight coupled heavy engines.

We must believe, however, that with every precaution, four pairs of wheels are the most that can be coupled together with advantage, and three pairs are certainly preferable to four. Thus, without a bogie, and with 6, 7

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	89 1/2	48	8	10,781,833	566,07	3,922,203	2,305,788	Sept. 30, 1880	Maryland Sterling.	3,000,000	5			
Baltimore and Ohio.....	Md.	89 1/2	380	13,111,800	10,781,833	566,07	3,922,203	2,305,788	Sept. 30, 1880	Mortgage.....	2,500,000	6	107 1/2	1885	
do do										"	700,000	6	108 1/2	1880	
do do										"	1,124,500	6	108	1875	
do do										"	1,000,000	6	109	1867	
do Washington Branch.....	Md.	30		1,650,000						1st Mortgage.....	791,000	7	55	1866	
Bellefontaine and Indiana.....	Ohio & Ind.	118		1,259,813	1,250,750	139,125	314,090	8,795	Dec. 1860.	2d ".....	160,000	7		1870	
do do															
Buffalo and State Line.....	N.Y. & Pa.	60	69	1,950,950	1,049,000	27,541	911,019	498,047	June 30, 1860						
do do															
Burlington and Missouri.....	Mo.	75		1,101,432	1,428,000		104,869	21,073		1st Mortg. 1st Div.	595,000				
Camden and Amboy.....	N. J.	138	96	3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860	1st Mortgage.....	450,000	6		1864	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,458	597,633	71,356	Aug. 1, 1859	1st ".....	800,000	7	105	1864	
do do										2d ".....	800,000	7	76	1865	
do do										3d " S. F.	950,000	7		1865	
do do										4th " S. F.	1,365,800	7	30	1876	
Central of New Jersey.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	1st Mortgage.....	1,400,000	6		1865 & 1870	
do do										2d ".....	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	85	232	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,000,000	7			
do do										2d ".....	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						3d ".....	1,000,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	22	194	2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	Pref 1st Mor. & S. F.	1,250,000	7	101 1/2	Feb. & Aug. 1	
do do										Gen'l 1st Mortgage.	3,600,000	7	72	Feb. & Aug. 1	
do do										2d ".....	2,000,000	6	44	May 1.	
Chicago and Rock Island.....	Ills.	89	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	1st Mortgage.....	2,000,000	7	115	1870	
Chicago, Burlington and Quincy.....	"	108 1/2	138	4,689,340	4,814,515		1,514,428	761,830		Cons. 1st Mort. S. F.	2,172,000	8	125	1863	
do do										" 2d " S. F.	813,000	8	115	1860	
do do										1st Mor. Chi. & Aur.	392,000	7		1867	
do do										2d ".....	303,490	7		1869	
do do										1st "Cent. Mil. Tract	303,000	7		1864	
do do										2d ".....	245,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	125	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d ".....	950,000	7	100	1860	
Cincinnati, Wilmington & Zanesville ..	Ohio.	132		In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000				
do do										2d ".....	532,000				
do do										3d ".....	104,000				
do do										Income.....	305,509				
Cleveland and Mahoning	Ohio.	68 1/2		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d ".....	459,000	7			
do do										3d ".....	344,100	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	66	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	106	1860	
do do										2d " M. L. or 1st Ex.	1,188,000	7	103	1873	
do do										3d 2d Ex.....	1,165,000	7	103	1865	
do do										4th 3d Ex.....	1,154,000	7	81		
Cleveland and Toledo.....	Ohio.	84 1/2	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	350,000	7	103 1/2	1867	
do do										1st " " 2d Div.	263,000	7		1872	
do do										2d ".....	265,000	7		1862	
do do										1st " Tol. Nor. & Clew	521,000	7		1863	
do do										2d ".....	293,300	7		1861	
do do										Junction Income..	44,500	7		1862	
do do										C. & T. Income..	300,000	7		1864	
Cleveland, Columbus and Cincinnati..	Ohio.	161	135	4,746,100	519,000	4,201	1,255,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	165	98 1/2	3,000,000	1,602,000	none	1,063,405	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	106	1861	
do do										2d ".....	303,000	7		1862	
Columbus and Xenia.....	Ohio.	115	54 1/2	1,490,000	290,700	50,500				Dividend.....	272,700	100		1860 to 1866	
Columbus, Piqua and Indiana	"	103		In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar 31, 1860.	1st Mortgage. . .	300,000	8			
do do										2d ".....	2,212,000	8			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845				1st Mortgage.....	300,000	7	50		
Detroit and Milwaukee.....	Mich.	186		No report			62,025	3,565	Aug. 31, 1860	1st Mortgage.....	2,500,000	7	90	1875	
do do										2d ".....	1,000,900	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	"	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328								
Evansville and Crawfordsville.....	Ind.	132		986,061	1,219,100	249,683	124,140	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.											
do do										1st Mortgage.....	400,000				
Galena and Chicago Union.....	Ills.	91	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	2d ".....	184,000				
do do										1st Mortgage.....	1,993,000		120	1862 & 1863	
Great Western	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	2d ".....	1,520,000		100	May 1, 1875	
do do										1st Mortgage W. D.	1,041,000	10			
Green Bay, Milwaukee and Chicago...	Wis.	64		400,000	No report					1st " E. D.	1,350,000	7			
Greenville and Miami.....	Ohio.	32		300,000	473,000	75,000	63,141	13,573							
Hannibal and St. Joseph.....	Mo.	206		1,041,086	10,351,000	220,336	996,907	512,933	Sept. 1, 1860.	Land Mortgage ...	5,000,000	88			
do do										Mortgage Conv...	1,354,000	67			
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,356	712,876	354,136	Aug. 31, 1860.	1st Mortgage.....	927,000	6		1873	
Hudson River.....	N. Y.	92	144	3,738,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	1st Mortgage.....	4,000,000	7	118	1869 & 1870	
do do										2d S. F.	2,000,000	7	114 1/2	1870	
do do										3d ".....	1,840,000	7	114	1875	
Illinois Central.....	Ills.	92	453	15,654,960	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	28,000	7	126	1863	
do do										Construction.....	12,883,000	7	113	1875	
do do										".....	4,115,000	6	100	1875	
do do										Debentures.....	42,740	7	100		
Indiana Central.....	Ind.			611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	604,000	7			
do do										2d ".....	578,000	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		Income.....	38,700	10			
do do										1st Mortgage.....	500,000	7		1866	
do do										2d ".....	400,000	7	90		
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	Real Estate Mort...	200,000	7	90		
do do										1st Mortgage.....	649,884				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report			2d ".....	314,000				
Iron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Quotation of Stock	Levy of Road	Capital paid in.	Total Fund ed Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount	Rate of Int.	Quotation of Bond.	Due.	Payable.
Iron Mountain.....	Mo.	66 1/2		\$ 1,970,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000	7	75	1861	
Jeffersonville.....	Ind.			1,015,907	681,000		302,006	122,797	Dec. 31, 1860.	1st 229,000	7	70	1861		
do										2d 392,000	7		1873		
Kentucky Central (Covington and Lexington).....	Ky.	90		Sold out under mortgage	2,930,000	337,632	426,408	227,534		1st Mortgage.....	160,000	6			
do										1st 260,000	7				
do										2d " Conv. 1,000,000	7				
do										3d " 600,000	7				
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D.	901,400		89		
do										2d " E. D.	1,011,000				
do										1st Land Grant W D	4,000,000		21		
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage.....	130,000	6			
Lexington and Frankfort.....	Ky.	29		514,433	130,000		105,914	43,267	June 30, 1861	1st Mortgage.....	1,300,000	6		1893	
Little Miami.....	Ohio.	63					1,330,030	529,981	Jan. 1, 1862	City Loan.....	174,000				
Louisville and Frankfort.....	Ky.	63		1,169,59	384,519		245,910	93,679	June 30, 1861	1st Mortgage.....	245,000	7			
do										1st Mortgage.....	2,000,000	7			
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,076	807,934	461,970	July 1, 1861.	1st " Lebanon Br.	400,000				
do										1st " Memphis Br.	500,000				
Louisville, New Albany and Chicago..	Ind.	288		2,600,000	3,000,000	200,000	645,827	371,402							
do															
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,563	99,080	Dec. 31, 1860.	1st Mortgage.....	600,000	7		1861	
Marietta and Cincinnati.....	Ohio.	203		2,561,213	190,438	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv	2,500,000	7		1868	
do										2d " 2,000,000	7				
do										3d " 1,500,000	7				
do										Sterling Income.....	333,000	4			
Michigan Central.....	Mich.	94	284	6,057,784	7,068,489	125,000	2,126,699	910,169	May 31, 1861	Domestic 928,617					
do										1st Mortg' Sterling	467,463	6	98 1/2	1872	
do										1st " Conv.	500,000	8	128	1869	
do										1st " unconv.	250,000	8	96	1860	
do										1st " Dollar Conv.	2,598,000	8	106	1869	
do										1st " S. F. Conv.	4,153,000	8	128	1862	
Michigan South'n & North'n Indiana	Mich &	57	246	9,018,200	9,714,704	437,886	2,075,459	1,039,820	Mar. 31, 1861.	Mort. Mich. So....	991,000	108		1860	
do	Guaranteed	101								" Nor. Ind.	985,000	103		1861	
do										" Goshen Line.	1,168,400	100		1860	
do										S. F. Toledo 2,850,000		113 1/2	1885		
do										2d Mortgage.....	2,465,000	103		1877	
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage.....	400,000	8			
do										2d " 204,000	8				
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage.....	420,000	8			
do										2d " 600,000	8				
Milwaukee and Prairie du Chien....	Wis.	38	192	4,944,000	2,556,000		583,186	439,943	Dec. 31, 1860.	1st Mortgage.....	2,556,000	7	111	1891	
Milwaukee and Western.....	Wis.	71		No report						1st Mortgage Conv.	1,000,000	7			
Mississippi and Missouri.....	Iowa.	35		No report						2d " S. F.	400,000	8			
do										Oskaloosa Div.	1,425,000	7			
do										Land Grant.....	7,000,000	7			
New Jersey.....	N. J.	34		4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage.....	711,000		109		
New Jersey Central.....	N. J.	64		2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.						
New York and Erie Pref.....	N. Y.	100		Sold under mortgage			5,590,916	1,979,400	Sept. 30, 1860.	1st Mortgage.....	3,000,000	125			
do	common..	74								2d " 4,000,000	125				
do										3d " 6,000,000	115				
do										4th " 4,900,000	113				
do										5th " 1,792,500	107				
New York and Harlem Pref.....	Conn.	64	138	5,717,190	6,055,752		1,142,851	433,716	Sep. 30, 1860.	1st Mortgage.....	2,050,000	7	119	1873	
do	common	33								2d " 1,000,000	7	105	1864		
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage.....	912,000	7	94	Dec. 1, 1866	
do														Oct. 1, 1875	
New York Central.....	N. Y.	120	356	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861	Cons. Cert. to St. H.	7,925,000	6	116 1/2	May 1, 1883	
do										Mortgage.....	3,000,000	7	117	June 15, 1864	
Northern Central.....	Md.	3 1/2	138	2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction.....	2,066,500	6		1885	
North Missouri.....	Mo.			2,423,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan.....	4,350,000	6			
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased.	9,880,000	2,330,030	698,817	153,669	May 1, 1861.	1st Mortgage.....	2,193,500				
do										3d " 316,995					
do										Construction.....	4,637,920				
Ohio and Mississippi, Western Div....	Ills.	148			3,292,403		No report			Income.....	3,591,183				
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	State Loan.....	7,000,000				
do										" S. W.	2,800,000	6			
do										Construction.....	4,500,000	6			
Pennsylvania.....	Pa.	359		13,261,960	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv.	4,900,000	6	104 1/2	1888	
do										2d " 2,319,000	6	98 1/2	1875		
do										2d " Sterling.	1,957,440	6		1875	
do										State Works.....	7,200,000	5	89		
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report								
Philadelphia, Wil. and Baltimore....	Del.	50	98	5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	1st Mortgage.....	2,300,000	6	90 1/2	1894	
do										Improvement.....	119,000	6		1863	
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	65	467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,363	761,555	June 30, 1861	1st Mort. O. & P.	1,000,000	7	117 1/2	1865	
do										2d " 750,000	7	106	1866		
do										1st " O. & I.	1,000,000	7		1872	
do										2d " 380,000	7		1873		
Pittsburgh and Connellsville.....	Pa.	49		1,751,226	1,292,700	67,560	80,537	29,690	Oct. 31, 1860.	Pittsburgh Subs'n.	500,000				
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,065,328	220,850	68,439	May 10, 1861						
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,097,000	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage.....	125,000	10		1856	
do										" 997,000	7		1866		
do										" 1,000,000	7		1875		
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,385,200	132,063	185,934	31,167	Dec. 31, 1860.	1st Mortgage.....	1,290,000	7		1866	
do															
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		401,975	500,000	100,000	110,200	53,100		1st Mortgage.....	500,000				
do										2d " 450,000					
Staubenville and Indiana.....	Ohio.			No report						1st Mortgage.....	1,500,000	7		1870	
do										2d " 900,000	7		1865		
Terre Haute, Alton and St. Louis....	Ills.	33	308	No report						1st Mortgage Conv.	1,000,000	7	108	1862	
do	Preferred	68								2d " Conv.	2,000,000	7	9	1868 & 1870	
do										1st " Bel. & Ill.	517,000	7		1873	
Terre Haute and Richmond.....	Ind.	105	73	1,381,450	230,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage.....	230,000	7	106	1860	
Toledo, Wabash and Western.....	Ohio & Ind	50	243	2,123,506	5,996,049	52,389	233,546			1st Mortgage.....	3,400,000	7	98 1/2	Aug. 1, 1865	
do	Preferred	80								2d " 2,500,000	7	92	Nov. 1, 1879		
do										Mort. Coupons....	94,049	7		1860 to 1865	

and 8 tons respectively on each wheel, we should have engines of 36, 42 and 48 tons weight. The Austrian goods locomotive, Steyerdorf, in the late Exhibition, had its 45 tons distributed upon no less than ten wheels, ingeniously, but we think not altogether commendably, coupled upon Herr Kirchweyer's system, for the purpose of passing at a slow speed through curves of 370 ft. radius. Engines of this construction have not yet, however, established their merits in any considerable period of actual service. A weight of 4 1-2 to 5 tons on a wheel is, however preferable to either 6, 7 or 8 tons, and to thus keep down the weight we must place a 50 ton or 60 ton engine on ten or twelve wheels. The late Mr. Stephenson preferred two separate tank engines, coupled together at the foot-plates, and engines intended to be thus coupled, and having, we believe, 8 1-2 tons on a single wheel, were made nearly six years ago for working the Bhoze Ghant incline, but as this incline is not yet open for traffic, and as different engines are now being made to work it, we cannot say what has become of those upon Mr. Stephenson's system. M. Petiet, of the Northern Railway of France, has preferred to employ four cylinders in the same locomotive, or a pair of cylinders at each end, and to arrange the six pairs of wheels in two groups of three pairs each, each group being driven by a separate pair of cylinders. Ten such engines are being made by MM. Gouin & Co., of Paris, the dimensions and weights being as follows: Diameter of each of the four cylinders, 16 9-16 in.; length of stroke, 17 5-16 in.; diameter of the twelve wheels, 3 ft. 6 in.; extreme wheel base, 19 ft. 8 1-4 in.; whole weight of engine in working trim, 56 tons 15 cwt., all available for adhesion; whole heating surface, 2,296 square feet. These engines carry in their tanks 1,765 gallons of water, and upwards of two tons of coal. The distribution of weight is almost exactly uniform on all the wheels, being about 4 3-4 tons on each. This condition of uniform distribution of weight is of much importance in coupled engines. All the wheels of M. Petiet's engine are flanged—needlessly so, we think—but the tires of the middle wheels are wider than the others. The wheels are not clustered quite as closely as they might be, room being left for brake blocks. The boiler is of the kind employed in the eight coupled engine sent by the Northern Railway of France to the late Exhibition, the chimney passing horizontally along the top of the boiler and through a drier or superheater and turning up in a short mouthpiece just over the foot-plate.

M. Petiet's engine would cost less, we should say, both for construction and repair, than two engines of the same collective power, and it is also more manageable. It is, at the same time more costly in structure, and probably in repairs, than a two cylinder locomotive of the same power, and having, say four pairs of coupled wheels, with over seven tons on a wheel. But the twelve wheel engine must be much easier on the line, even with the long wheel base, than an eight coupled engine of the same weight would be, although the twelve wheel engine cannot have the flexibility on curves which distinguishes Mr. Stephenson's system of double engines, and also the ten wheel bogie engine, and, possibly, the Austrian ten coupled engine. But for lines of moderately easy curvature, that is to say, having no curves under 15 chains radius, we should say that M. Petiet's solution of the problem of very heavy engines was the best, on the whole, yet offered. The French engineers appear to be returning to moderate, if not small diameters of driving wheels, whereby a less

weight is necessary than with large wheels. Thus with the same boiler in both cases, and with the same length of stroke, 16 in. cylinders and 3 1-2 ft. driving wheels would give rather more tractive power, at the same speed, than 30 in. cylinders and 5 1-2 ft. wheels; and no engineer need be told how much lighter an engine, having the first named dimensions, would be than one on the larger scale mentioned. The small wheel engine would, of course, run with a greater speed of piston, and, although it would have less disturbing weight, its wheels would turn faster at a given speed in miles per hour. With accurately counterweighted wheels the limit of piston speed has not, we think, yet been reached, and we certainly incline in favor of the smaller wheel, even if a rather slower speed be thus rendered expedient. We believe that most of our goods engines are run at too fast a rate, and that slower and longer goods trains would tell favorably upon railway dividends. Small wheeled goods engines with a low centre of gravity would meet the case exactly.—*London Engineer.*

MONETARY & COMMERCIAL.

We have had another week of intense speculative excitement marked by further advances and fluctuations in gold and securities. The highest point reached by gold was 162, but it subsequently declined and closed at 155. The news which reached this city yesterday of a terrible disaster to the blockading fleet before Charleston, although from rebel sources, created quite an excitement, and for a time holders were unwilling to sell even at very advanced prices; but after the receipt of the New York dispatches, and it was apparent that the Charleston news had not made any serious impression on the markets there, the speculative fever disappeared. The facts of the Charleston Harbor affair seem to be, that two iron clads, which we have been told, for some time, were building there, and of the future performance of which we have heard all sorts of threats, accompanied by three steamers as tenders, made an unexpected dash from their posts in the harbor, on the morning of January 31st, and just before dawn attacked some of the weaker Federal vessels. During a portion of the engagement a dense fog prevailed. They claim to have sunk the *Mercedita*, which was disabled by a shot through the boiler, paroled her officers and crew, and then left them to perish in the sinking vessel; and disabled the *Quaker City*. They also claim to have sunk another vessel, name not given, and finally the last dispatch claims a complete victory over the whole fleet, and that they sank two vessels, set on fire four others, and drove the rest away. Whereupon General Beauregard and Commodore Ingraham join in a proclamation that the blockade of Charleston harbor has been legally raised, and the British war steamer *Petrel*, having on board a number of foreign consuls, go out to see for themselves, and on their return hold a meeting to discuss the question. The dispatches close with the ominous statement that

twenty blockaders are off the bar to-day. All this it must be remembered is from rebel sources, and has the usual appearance of much brag about little facts. It seems hardly probable that a naval officer would capture a vessel and parole her officers and crew on a sinking ship. For the truth of the matter we must wait for our own dispatches, which should reach us soon. But be the facts as they may, it would seem that our fleet has been caught napping, and that we were surprised and unprepared. Such disasters will continue to occur until the Government institutes strict investigations into the cause of every disaster to our army, and punishes officers guilty of negligence and cowardice in a proper manner. No one questions the physical superiority of the loyal over the rebellious States. Their resources in men and money have proved, on the test, much greater than was ever claimed for them. But we have also seen that long years of peace have deprived us of experienced generals, and consequently our leaders were in the main untried men; and that places high in command were too frequently bestowed for political reasons without regard to the experience or fitness of the individual. The Government should profit by the experience of the past, and reward talent wherever found, irrespective of political considerations. Such a course cannot fail to bring success, while an opposite one will result in disgrace. It is quite certain that the future of gold, government securities, and all kinds of property depend wholly on the conduct of the Government and the result of the war. The speculative feeling, especially in New York, runs high. Wall street is filled with outside operators, who generally go a little beyond the quotations of the Board and are all anxious to buy or sell \$5,000 or \$10,000 of gold. The banks seem possessed with an infatuation to lend on gold in preference to other securities, forgetting that fully half of the present enormous premium has accrued during a single month, and the facilities for speculation invariably add to the fever. A great victory would produce a wonderful change, and the revulsion would be as sudden as the expansion.

There has been a fair demand for money during the week, consequent mainly upon speculative advances in prices. It has all been met by the bankers at their regular rates. We quote good paper at ten per cent. Permanent good investments at 8 per cent, and a little less rigid scrutiny of names than heretofore noticed.

Exchange has been quiet but firm during the week. Quotations are not materially changed from our last. They are as follows:

	BUYING.	SELLING.
New York.....	1-6@1/2	1-6@1/2
Philadelphia.....	"	"
Boston.....	"	"
Gold.....	55 prem.	58@60 prem.
Silver.....	40@45 prem.	
Demand Notes.....	56@52 prem.	

Bankable funds at this time are United

States Treasury Notes, Ohio State Bank Currency, currency of the Bank of Indiana and the Kentucky Banks. The issues of the Indiana and Kentucky banks command a premium of three per cent. The issues of Eastern banks, including New York, New England, and Pennsylvania, except Pittsburg, which is par, are all placed at $\frac{1}{2}$ discount. Missouri currency, 1 discount, except Farmers' and Union Banks which are 5 discount. Iowa bank notes 1 discount. Illinois and Wisconsin 2@55 discount. Maryland 1 discount. Virginia, Wheeling City and Point Pleasant Br. 1 discount. Other branches, 2 discount, except Jeffersonville which is 20 discount. Eastern Virginia and other parts of Rebeldom 40@50 discount. Tennessee, Union and Planters Bank 5 discount. Other banks 25 discount.

General business has been fair during the week. It is considerably in advance of the season. No doubt the cause of this lies in the fear of enormous speculative advances.

Flour and grain participated to some extent in the speculative movement. We quote wheat, prime red, at \$1.28@1.30. White \$1.33@1.35 for Ohio and Indiana, and \$1.35@1.37 for Kentucky. Flour, superfine, \$6.10@6.15. Extra \$6.12@6.30. Family \$6.40@6.50. The advance in this article does not equal the rise in gold, and is much below what might be expected in a leading article of export, at the present high rates of foreign exchange. Corn has advanced largely. In bulk we quote it at 65c, and in sacks 72@75c. Oats are firm at 62@63 in bulk, and 72@73 in sacks. Rye is quoted at \$1.10 to arrive and \$1.15 in store. Barley, prime Fall, at \$1.33@1.35, and Spring \$1.20@1.25.

Groceries are advancing.

The packing season is drawing to a close. Mess pork is quoted at \$12 for city old, and \$14.50 for new. Green meats in bulk are 4 $\frac{1}{2}$ c for shoulders, 6c for sides, and 7@7 $\frac{1}{2}$ c for clear sides.

The Chicago & Alton Road earned the week ending Jan. 23, 1863:

	1863.	1862.
Passengers.....	\$10,356 76	\$ 7,678 89
Freight.....	12,312 44	11,032 81
Sundries.....	1,035 33	947 83
Total.....	\$23,704 53	\$19,619 21
Increase in 1863.....	4,055 00	
Total this month to date.....	\$68,754 76	\$66,512 21
Total since Jan. 1.....	68,754 76	56,512 21

In consequence of a change in a contract with the Joliet Railroad, their proportion is now included for both years.

The following is a comparative statement of the earnings and expenses of the Rome, Watertown and Ogdensburg Railroad, for the month of December, in the years 1861 and 1862:

	1861.	1862.
Earnings.....	\$30,352 29	\$42,120 50
Expenses.....	31,095 58	26,357 83
Net.....	\$5,305 80	\$17,732 57

The earnings of the Illinois Central Road for the third week of January, 1863, and the same time in 1862, were:

Third week of Jan. 1863.....	\$64,056 98
Third week of Jan. 1862.....	47,936 63
Increase.....	\$16,070 33
Increase in first three weeks in January.	
1863.....	42,524 67

The Chicago & Alton Road earned the week ending Jan. 23, 1863:

	1863.	1862.
Passengers.....	\$10,356 76	\$ 7,678 89
Freight.....	12,312 44	11,032 81
Sundries.....	1,035 33	947 83
Total.....	\$23,704 53	\$19,619 21
Interest in 1863.....	4,055 00	
Total this month to date.....	\$68,754 76	\$66,512 21
Total since Jan. 1.....	68,754 76	56,512 21

The business of the Philadelphia and Reading Railroad for December were as follows:

	1862.	1861.
Received from coal.....	\$357,96 33	\$202,693 70
Received from merchandise.....	52,714 69	44,463 12
Received from travel, &c.....	44,145 27	31,057 59
Total.....	\$433,822 64	\$276,203 91
Transportation, roadway, dumpage, renewal fund, and all charges.....	651,888 91	401,005 26
Net profit for the month.....	\$238,303 67	\$155,433 56

The earnings of the Chicago and North-Western Road for the week ending Jan. 14 are as follows:

Passengers.....	\$5,593 02
Freight.....	8,151 99
Mail.....	423 95
Express.....	221 87
Total.....	\$14,390 83
Same period last year.....	11,488 49
Increase.....	\$2,902 34

The Terre Haute and Alton Road earned the first half of January:

1862.....	\$31,279
1863.....	47,631
Increase.....	\$16,352

The third week of January on the Southern Michigan Railroad gives a large increase:

1862.....	\$33,485
1863.....	50,724
Increase.....	\$17,239

The detail of the earnings of the Galena & Chicago Union Railroad for the week ending Jan. 22, is:

	1862.	1863.	Inc.
Freight.....	\$13,895 94	\$21,979 59	\$5,383 65
Passengers.....	4,001 54	6,004 17	1,993 59
Mails, &c.....	1,250 00	1,101 00	150 00
Total.....	\$24,147 53	\$31,379 76	\$7,232 24

The earnings of the Chicago and North-Western Road for the week ending Jan. 21 are as follows:

Passengers.....	\$5,511 12
Freight.....	7,192 64
Mail.....	423 95
Express.....	221 87
Total.....	\$13,349 08
Same period last year.....	11,242 94
Increase.....	\$2,606 64

The Rock Island Road earned in the third week in January:

1862.....	\$27,667
1863.....	37,512
Increase.....	\$9,845

The Buffalo, New York and Erie Road earnings for 21 days in January:

1862.....	\$43,128 71
1863.....	64,144 18
Increase.....	\$21,005 04

OLD COLONY & FALL RIVER R. R.—The annual report of this company presented to the stockholders at their late annual meeting shows the statement of its earnings for the year ending in Nov. 30, 1862, to have been \$580,150 16; of which \$379,832 63 was derived from transportation of passengers, and \$200,317 53 from the carrying of freight. The expenses during the same period were \$286,581 61. The net earnings of 1862 exceed those of the previous year by \$84,723 08; while the expenses during the year 1862 were decreased \$9,893 69. The balance of income now on hand exclusive of dividends heretofore declared is \$824,791 01.

FITCHBURG R. R., MASS.—The annual report of this company, made up to November 30, 1862, shows the total income for the past year to have been \$580 579 94, and the expenses were \$326,433 71, leaving a balance of \$254,146 23, or a surplus of \$75,282 52, after paying the January dividend of 8 $\frac{1}{2}$ cent. The Company has also assets not in any way required for railroad purposes worth \$16,213 42, and the corporation free from debt. Within the year the Marlboro' & Feltonville Branch Railroad, which cost \$160,000 to construct, has been purchased by the Fitchburg Company for \$27,500.

BOSTON & WORCESTER R. R.—The thirty-third annual report of this Company shows the condition of the road up to Nov. 30, 1862. The gross earnings for the year were \$1,006,129 82; total expenses, \$515,825 72.

Net income after deducting expenditures.....	\$430,304 10
Deduct dividend, 4 per cent, July.....	\$180,000 00
Deduct dividend, 4 per cent, Jan.....	180,000 00
Deduct Government tax on January dividend.....	5,567 01
Leaving a surplus for the year, not dividend, of.....	\$151,787 03
Increase of income as compared with last year.....	77,197 09

The Michigan Central Road earned the third week in February:

1862.....	\$47,730
1863.....	53,574
Increase.....	\$5,844

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RAILROAD.

Opened for Business May 13, 1861!

Through Distance 260 Miles;
42 Miles Shorter than any other Route
NEW SLEEPING CARS ON ALL NIGHT TRAINS.

Passenger Trains leave C., H. and D. Depot, at 8:00 A. M., 7:00 P. M., and run through to Chicago without change of Passenger or Baggage Cars, in less time and at lower speed than by any other route.

For information and through Tickets please apply at the offices, south-east corner of Front and Broadway; corner Vine and 3d, under Burnett House, and at Sixth street Depot.

Freight trains leave at 6:00 P. M., and run directly through to Chicago without reloading or transhipment.

JOHN BRANT, JR., Superintendent;
C. E. FOLLETT,
General Ticket Agent, Richmond, Ind.
S. W. CHAPMAN, Gen. Freight Agent,
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CAST STEEL WORKS. OF FRIED. KRUPP,

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Patent Railway Tires, without a weld. Axles, Cannon, Anchor Flukes,
Propeller Blades and Shafts. Cranked Axles and Shafts,
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CAST STEEL IN BARS, BEST QUALITY,

Suitable for Axles, Shafts, Rolls, Tools, Dies, Needle and Music Wire, Fine Cutlery, &c,

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They will, without turning, entirely outwear the best Iron ones.
Wear uniformly, without flat places, or lamination.
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BRIDGE BOLTS, Rivets of all sizes, Coach
Screws, and Thresher Teeth, made on short notice and on
the most favorable terms. Nov 27, ly

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RAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A.
M., Express, and 11, P. M., Express.

On Sundays at 3.30, A. M., and 11, P. M.

Leave Baltimore for the North and West daily, at 8.30;

A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail,
and 7.00 P. M., Express.

On Sundays at 7, P. M., only.

Through connections made for all points at the
North, East and West.

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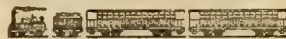
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SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it
unites with Railroads for and from all points in the West
and North-west.

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CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily
from the foot of Mill, on Front-street. Through to Indi-
anapolis. Terre Haute, Lafayette and Chicago in advance
of all other roads.

FIRST TRAIN—5:00 A. M.—Chicago Mail for Indian-
apolis. Lafayette and Chicago, connecting at Chicago with
all Western and North-western trains. Terre Haute train
leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—12:45 A. M.—Indianapolis, Lafayette,
Springfield, Quincy, Palmyra and St. Joseph Express ar-
rives at Indianapolis, Lafayette, Springfield, Quincy,
Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.
Terre Haute and Alton train leaves Indianapolis at 8:20
P. M.

THIRD TRAIN—5:00 P. M. Chicago Express for In-
dianapolis, Lafayette, Chicago, connecting at Chicago with
all Western and North western Trains.

Sleeping cars are attached to all the night trains on
line, and run through to Chicago without change of cars.

Be sure you are in the RIGHT TICKET OFFICE before
you purchase your Ticket, and ask for tickets via Lawrence-
burg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through.

Through tickets, good until used, can be obtained at the
Ticket Offices north-west corner Broadway and Front sts.;
No. 1 Burnet House corner, and at the Depot office, foot of
Mill, on Front street, where all necessary information may
be had.

Omnibuses run to and from each train, and will call for
passengers at all Hotels and all parts of the city by leaving
address a either office.

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In the best Manner, at the Shortest Notice,
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This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition The well-earned reputation of this Road for
SPEED, SECURITY AND COMFORT Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

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At the Ohio River with Cleveland and Pittsburgh, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

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Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

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An Express Freight Train

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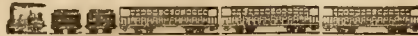
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WITH PROMPTNESS AND FIDELITY.

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FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM
PITTSBURGH TO PHILADELPHIA
(with close connections from Western Cities.)
ALL CONNECTING DIRECT TO NEW YORK,
THROUGH PHILADELPHIA,
AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE AND WASHINGTON.

FROM PITTSBURGH TO NEW YORK.

ONE TRAIN RUNS DAILY (430 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM
PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.

BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

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By this Route Freights of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburgh with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburgh.

CLARKE & CO., Transfer Agents, Pittsburgh.

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W. W. ALKMAN & CO., Evansville, Ind.

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CLARKE & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

G. B. NEAL, Parkersburg, Virginia.

HALL & CO., Marietta, Ohio.

H. S. PIERCE & CO., Zanesville, Ohio.

MEDOWELL & McCORM, Portsmouth, Ohio.

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Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

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General Railroad Arrangement.

—
UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE
Cincinnati Express.....	7:00 A. M.	9:20 P. M.
Mail and Express.....	8:30 A. M.	6:20 P. M.
Columbus Accommodation.....	4:00 P. M.	11:05 A. M.
Morrow Accommodation.....	6:00 P. M.	8:05 A. M.

Cincinnati Hamilton and Dayton RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE
Dayton and Sandusky Mail.....	7:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	7:30 A. M.	11:40 P. M.
Cin. & Chicago Air-Line Ex.....	8:00 A. M.	8:50 P. M.
Dayton and Richmond.....	3:15 P. M.	1:30 P. M.
Day., Toledo & Detroit Huntsville.....	5:20 P. M.	10:55 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	8:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:50
Eastern Night Express.....	10:00 P. M.	7:10 A. M.

The Eastern Night Express leaves SUNDAY NIGHT in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE
Lafayette and Chicago Mail.....	5:00 A. M.	12:20 P. M.
Indianapolis and Terre Haute.....	5:00 A. M.	12:20 P. M.
Decatur, Springfield & Quincy.....	12:45 A. M.	4:45 P. M.
Chicago Night Express.....	5:00 P. M.	10:40 A. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY
For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE
Louisville and St. Louis Mail.....	6:15 A. M.	10:00 P. M.
Louisville and St. Louis Night Ex.....	7:10 P. M.	7:20 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES SLOWER than Cincinnati time.

For all information and Through Tickets please apply at the office: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots.

SLEEPING CARS ON ALL NIGHT TRAINS.

Omni-buses call for passengers as usual.

P. W. STRADER,
General Ticket Agent L. M. & C. & X., and C. H. & D Railroads.

W. H. L. NOBLE,
General Ticket Agent Indianapolis & Cincinnati Railroad.

E. F. FULLER,
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MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,

OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET

NEW YORK.

ALFRED BRIDGES.

JOSEPH

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.

Steel Wire and Whalebone Tube BRUSHES.
Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES
Glass Enameled Iron WATER PIPE
Wrought Iron STEAM PIPE.

THOS. PROSSER & SON,
28 Platt Street, N. Y.

N. W. BALDWIN, MATHEW BAIRD.
M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business, our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order—Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned
THEODORE DEHON,
no 7 10 Wal Broadway, New York

EDWIN J. HORNER,
SUCCESSOR TO

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**LOCOMOTIVE & RAILROAD
CAR SPRING
MANUFACTURER,
WILMINGTON, DELAWARE.**

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,
Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

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Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, low-priced Family Machine, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being alike on both sides, impossible to ravel, and leaving no chain or ridge on the under side, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.
Feb 12.

WM. SUMNER & CO.

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—AND—

Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
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MOSELEY & CO.

JAMES FOSTER, Jr. & Co.,
MATHEMATICAL AND PHILOSOPHICAL INSTRUMENT MAKERS,
S.W. CORNER FIFTH AND RACE,
Cincinnati Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

H. TWITCHELL. JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase
Ag. 4. m. G.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,

Engine and Car Axles, Pump and Piston Rods
Bar of all Sizes,

And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammer-rod. The whole operation from ore to finished Iron is conducted at our own Works
June 9.

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SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, President.
WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

NORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1½ to 30 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from ½ inch to 8 inches inside diameter, with screw and socket connections for Steam, Gas, Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—½ to 24 inch diameter, and branches for same, &c.

Gas Works Castings, etc., etc.

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STEPHEN MORRIS, CHAS. WHEELER,
THOS. T. TASKER, JR., S. F. M. TASKER,
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MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroads for the South and West. For sale by 1,000 leading Grocers and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON. } Editors

CINCINNATI:

THURSDAY, FEBRUARY 12, 1863.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.
One square, single insertion..... \$1 00
" " per month..... 3 00
" " six months..... 12 00
" " per annum..... 20 00
" column, single insertion..... 50 c
" " per month..... 10 00
" " six months..... 40 00
" " per annum..... 80 00
" page, single insertion..... 15 00
" " per month..... 25 00
" " six months..... 110 00
" " per annum..... 200 00
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If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—

	Depart.	Arrive.
Cincinnati Express.....	7.00 A. M.	9.30 P. M.
Mail and Express.....	8.20 A. M.	6.20 P. M.
Columbus Accommodation.....	4.00 P. M.	11.45 A. M.
Morrow Accommodation.....	6.00 P. M.	8.05 A. M.

Cincinnati, Hamilton & Dayton—

	Depart.	Arrive.
Cin. & Chicago Air Line.....	8.00 A. M.	8.50 P. M.
Dayton & Sandusky.....	7.00 A. M.	6.45 P. M.
Dayton & Toledo.....	7.00 A. M.	11.40 P. M.
Dayton Accommodation.....	3.15 P. M.	1.30 P. M.

	Depart.	Arrive.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.55 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	8.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.50 A. M.
Eastern Night Express.....	10.00 P. M.	7.10 A. M.

Sandusky, Dayton & Cincinnati—

	Depart.	Arrive.
Morning Express.....	7.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.55 A. M.

Marion & Cincinnati—

	Depart.	Arrive.
Mail.....	7.45 A. M.	5.35 P. M.
Accommodation.....	3.30 P. M.	9.55 A. M.

Ohio & Mississippi—

	Depart.	Arrive.
Mail.....	6.15 A. M.	10.00 P. M.
Express.....	7.10 P. M.	7.20 A. M.

Indianapolis & Cincinnati—

	Depart.	Arrive.
Mail.....	5.00 A. M.	12.20 A. M.
Chicago Express.....	5.00 P. M.	10.40 A. M.

Dayton & Michigan—

	Depart.	Arrive.
Toledo, Detroit & Chicago Exp.....	7.00 A. M.	11.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.55 A. M.

Cincinnati & Chicago Air Line—

	Depart.	Arrive.
Mail and Express.....	8.00 A. M.	8.50 P. M.
Night Express.....	7.00 P. M.	8.10 A. M.

Cincinnati, Wilmington and Zanesville—

	Depart.	Arrive.
Morning Express.....	8.30 A. M.	6.45 P. M.
Accommodation.....	6.00 P. M.	8.20 A. M.

Kentucky Central— (City time.)

	Depart.	Arrive.
First Train.....	6.45 A. M.	10.27 A. M.
Second Train.....	2.10 P. M.	6.30 P. M.

The trains on the Little Miami, and Cincinnati, Hamilton & Dayton, Marion & Cincinnati, and Cincinnati, Wilmington & Zanesville Roads, are run by Columbus, which is 7 minutes faster than Cincinnati time.

Trains on the Ohio & Mississippi, and Indianapolis & Cincinnati Roads, are run by Vincennes time, which is 12 minutes slower than Cincinnati time.

BEET ROOT SUGAR.

The question of manufacturing sugar for domestic purposes from the beet root is by no means a new one in this country. The subject was fully agitated many years ago, and much attention paid to it. But the competition of Southern sugar cane in its best days of prosperity was too severe, and the infant business never proceeded beyond an experiment. The present high prices of the Southern cane sugar affords a fine margin for experimenting in beet root sugar.

In Europe the subject was first introduced a little over a century ago. In 1747 Mr. Morggraf, the director of the royal apothecary at Berlin, published a small work on the manufacture of this sugar. But it appears to have attracted but little attention at the time. In the year 1800 another work on the same subject appeared from the pen of Mr. F. C. Achard, in Prussia. This was more successful than the previous effort of Morggraf, and the King of Prussia placed an estate at the disposal of Achard, for the purpose of experimenting in the production of the beet sugar. The experiments of Achard were, however, but partially successful, as but two or three per cent of sugar could be extracted from the beet. The subject, however, was fairly introduced, and much attention was paid to it. In 1809 one manufactory at Augsburg produced 20,000 pounds, while numerous other factories in other parts of Germany produced smaller amounts.

During the wars of Napoleon, sugar became very scarce in France, and at one time reached the enormous price of six francs per pound. To mitigate this evil, the Emperor offered a reward of 1,000,000 francs to any one who would discover a satisfactory method of making sugar from an indigenous plant. With this inducement as a spur to enterprise, numerous manufactories sprung up, and in 1810 we find there were 200 sugar manufactories in France, which produced an aggregate of 2,000,000 pounds of sugar. From this period the manufacture has been gradually extending and improving as experience suggested changes for the better. In the year 1828 there were fifty-eight beet sugar manufactories, while in 1835 these had increased to 349, and in 1837 to 542. The total production at this time amounts to 90,000,000 pounds per annum. In 1851 the number of manufactories had been reduced to 304; but the total production had increased to 147,000,000 lbs., or about half of the consumption of the whole kingdom. In 1853 the total production was 165,680,790 pounds.

During this period the production of the German States had also largely increased. In 1848 it amounted to 52,000,000 pounds. In 1849 it reached 68,000,000. In 1851 86,000,000 pounds, and in 1856 it amounted to 160,000,000 pounds.

The experience in Europe has been, that

large establishments were much more remunerative than smaller ones. In the course of the development of the business, and by improvements in the appliances for extracting the saccharine matter, the per centage of sugar obtained has been increased from two to three per cent, as it was in 1800, to eight to twelve per cent, as the average of the present time. In 1861 the product of France alone was 148,000 tons. That of Belgium 18,000 tons, and the aggregate for Europe was estimated at about 200,000 tons; which at the rate of ten cents per pound would be worth over \$40,000,000. France has made herself entirely independent of foreign countries for this luxury, now almost a necessity of life.

The experiment has been successfully tried in Ohio, and under the present high prices of foreign and domestic cane sugars we look for the establishment of a permanent business in this branch of agriculture in the North. If the business once becomes established, and a little experience obtained in the management of the manufacture, it will become a permanent thing. It is estimated that an acre of fair land will yield fifteen to twenty-five tons of beets, which can be cultivated for a cost of about one dollar per ton. The per centage of saccharine matter is from nine to fifteen per cent. Assuming the average of twelve per cent to be correct, we then have for the product of one acre of land twelve per cent of say 20 tons of beets, or 2 4-10 tons of sugar at \$200 per ton, or a total of \$480—a sum which affords ample margin for mistakes in experimenting on the subject.

Our readers will find, by reference to our files, in our issue of January 1st, 1863, a very interesting article by Prof. J. H. Klippart, Sec'y of the Ohio State Board of Agriculture, detailing the results of the culture of ten acres of the sugar beet in Licking county, Ohio. It would seem by this experiment that by proper culture in our climate, and with moderate soil, a much larger product can be obtained than we have here estimated. For the details of the culture and manufacture, we would refer to the previous article.

In Europe, lands suited to the culture of the sugar beet rent at from \$20 to \$35 per acre, while in this country better lands can be bought for less than half this sum; and the crop is peculiarly adapted to our climate. We pay now nearly \$40,000,000 per annum to foreign countries for sugar alone. At the present high rates of foreign exchange, this amounts actually to \$60,000,000 of expenditure at home. It will therefore be a great desideratum to produce on our own soil all the sugar which we consume.

The earnings of the Hudson River Railroad for the month of January were:

1863.....	\$459,953 06
1862.....	307,330 18
Increase.....	\$151,622 88

PACIFIC R. R.—ITS GAUGE.

We noticed in our last issue, that the President of the United States, in conformity with the discretionary power, conferred upon him by act of Congress, had established five feet as the gauge of the Pacific Railroad, to be built under the act of Congress. And we stated then our conviction that he had acted unwisely. We notice that most of our contemporaries agree with us in opinion. We have seen as yet but one dissenting voice. The Railway Times of Boston says: "President Lincoln has decided that the gauge of the Pacific Railway shall be five feet; and in so doing we believe he has adopted the best possible width for the great national road; a width which is mechanically more desirable than any other." The editor subsequently remarks: "It would be better, in our opinion, if the gauge was to be fitted to any existing roads, to make it that of the larger part of the railways in this country; i. e., 4 feet 8½ inches, since such width is found ample for the largest traffic and for the heaviest engines." He afterwards remarks "uniformity in gauge, we believe would be productive of immense economy, in both the manufacture and operation of railways." Exactly so. The editor of the Times has expressed the whole gist of the argument in favor of making the great Pacific Railroad 4 feet 8½ inch gauge. It would then be uniform with by far the greater portion of the railroads of the country, and that gauge is found quite sufficient for the heaviest traffic and by far more economical than any other.

The Pacific Railroad is to be built by National credit, on the plea, and we think very justly and wisely so, that this great highway is a national necessity; a necessity not only in times of peace for social and business intercourse of the country, but pre-eminently a necessity in times of war, for the speedy and safe transportation of our armies from one portion to another of the great American Nation. Can such an end be accomplished by making a break of gauge as well as it could be by accommodating the gauge to that of the leading lines of the country? Suppose it necessary to move an army of 100,000 men with great rapidity from California to Washington City. Will such a movement be facilitated by a break of gauge? Or suppose it to be necessary to send 100,000 men to the Pacific coast to repel a foreign invasion, would not such a movement be greatly facilitated if we could take half the equipment of the leading Atlantic lines and send one enormous train forty or fifty miles in length, if need be, away across the continent.

The authorities of the Rebel States have found the advantages of a uniform gauge, in the rapid movement of troops from one part of Rebeldom to another. The railroads of the South are all of the standard gauge of *five feet*. The equipment of every railroad in the South can be accumulated at one spot, and a military

movement executed with a celerity that often astonishes and appalls the National authorities. Is Burnside driven back at Fredericksburg and unfitted for a forward movement for a time, we find the Rebel army shot with lightning speed to Tennessee or Vicksburg, with as much ease and comfort as though it were but a question to change the camp ground a mile or two. While, if the National troops are to be moved, we are limited to the capacity of the equipment of each section of the line over which they are to go.

With the experience of the past two years, calling loudly for a uniformity of gauge, we cannot but wonder that the President has adopted a gauge that accommodates nobody and connects with no road now made or making towards the terminus of the great Pacific highway. It is true the railroads of the South are of the uniform gauge of five feet. But those roads do not connect with the Pacific Railroad, and if they did, they would lead from, and not to, the great commercial centres of the country. We cannot believe that the President of the United States could have been induced to adopt the five feet gauge from motives of consideration for these roads, for they did not ask any consideration at his hands. It is true also that it would be an immense advantage to the single broad gauge line which will extend from St. Louis to New York, to procure the adoption of the broad gauge on the Pacific Railroad. But the consideration that should have influenced the President in his selection of a gauge should have been the good of the country, and the adaptation of this great national enterprise to this end. And in seeking to do his duty in this very important matter, we think the fact that the narrow gauge is the leading gauge of the country, and would in case of necessity afford the greatest facilities for rapid transit, should have been paramount to all other considerations. Mr. Lincoln should not have allowed himself to be driven from a plain duty for fear that the majority should be better accommodated than the minority; or in other words, that the narrow gauge lines should obtain some business advantage over the single broad gauge line.

We trust the matter may yet be reconsidered. As with this break of gauge we deem one half at least of the advantages of the Pacific Railroad wholly and irretrievably lost.

The Rock Island Road earned the fourth week in January:

1862.....	\$27,137
1863.....	35,863
Increase.....	\$8,676
and for the month an increase of.....	32,707

The figures of the Illinois Central Railroad for January are as follows. The traffic shows an increase of about \$60,000.

Traffic.....	\$965,000
Land sales.....	138,000
Cash collections.....	72,000

SANDUSKY, MANSFIELD AND NEW-ARK R. R.

We are in receipt of the seventh annual report of this company, made to the stockholders at their meeting January 21st. The fiscal year ends Dec. 31st. The earnings for the year have been as follows:

From passengers.....	\$90,851 03
" freight.....	132,471 39
" mail and express.....	16,073 26
Total.....	\$239,395 67

EXPENSES.

Track repairs.....	\$54,138 37
Train expenses.....	50 074 29
Station expenses.....	17,974 38
Oil, fuel, etc.....	13,928 69
Shops.....	5,135 68
Salaries, stationery and sundries.....	17,093 38
Total expenses.....	\$156,407 19
Btl. Net.....	\$82,988 48
Gross earnings, 1862.....	\$239,395 67
" " 1861.....	171,711 93
Increase.....	\$67,683 69
Expenses, 1862.....	\$156,407 19
" " 1861.....	134,101 75
Increase.....	\$22,305 44

The above summary shows that while the *gross income* has increased nearly 40 per cent, the *expenses* have only increased 16 per cent.

Net earnings for 1862.....	\$82,988 48
" " 1861.....	37,610 23
Net gain.....	\$45,378 25

The income for 1862, both gross and net, is the largest realized by the company since 1856.

This gratifying increase in your business is mainly attributable to the liberal *wheat crop* of 1862. With an equally good crop the present year, we believe your earnings will show a handsome increase over those of the past year.

While the aggregate earnings of 1862 exceed those of 1861, \$67,683 69, the sum of \$57,489 20 or 85 per cent of it, was gained in the last half of the year. It is believed that a large share of the last wheat crop still remains with the farmers, and we look forward to a gratifying increase in our traffic the ensuing Spring, over the corresponding period of last year.

The road has been maintained in good order the past year. It will be seen that 141 tons of *new rails* have been purchased and laid in the track; also, 100 tons of *re-rolled* rails, 16,000 lbs of *spikes* and 8,279 new *chairs* have been used, and 2,412 rails repaired.

Important alterations and improvements have been made in *side-tracks*, water stations, wood houses etc., at various points on the road.

The bridges, culverts, masonry and "protection," have received proper care, and 11½ miles of additional track *ballasted* during the year.

Our locomotive engines have received careful attention, and this department is in satisfactory condition. We have built one passenger car, twenty-seven superior grain and merchandise cars, and eight small cars for repairs and ditching. We have also purchased and

received during the year, two hundred and eighty-eight new *car wheels*. The estimate for the present year embraces twenty new *box cars*, one passenger car, and ten stock, coal, and platform cars; this may be increased or diminished as our wants may indicate.

The total *mileage* of all trains has been 214,404 miles, at a cost of 71 95-100 cents per mile; repairs of locomotives 4 8-10 cents per mile run. Cost of *fuel* per mile run 6 8-100 cents.

The largely enhanced cost of labor, and all materials required in the maintenance of railroads and railroad equipment, will increase our operating expenses the current year.

The Directors at their April meeting, directed your Treasurer to pay the balance of the original issue of "*Domestic Bonds*" falling due July 25, 1859, and at their October meeting, he was further instructed to pay the same class of bonds that had matured July 25, 1860 and 1861. Notice was accordingly given to the holders as far as they were known to him, to present their bonds for payment, and, as will appear from his report, the sum of \$61,550 has been redeemed within the year ending December 31st, 1862. Of these bonds there remain outstanding and unpaid, *at this date*, the sum of \$2,900. The Treasurer has been instructed to issue public notice in a daily newspaper, requiring the presentation of these bonds for payment, before 1st day of February next, and that interest on them will cease at that date.

We congratulate the stockholders on our release from this long standing obligation; we likewise take the occasion to express our grateful satisfaction for the patient *forbearance* exercised by the holders of these bonds. Of the *new series* of domestic bonds, issued under a *decree* of court on final settlement with the receiver of the old company, amounting in all to \$20,000, the board have to state that they were payable in instalments of \$5,000 each, maturing in April and October, 1862 and 1863. It will be seen that two instalments (\$10,000) have already matured, and the balance matures this year.

When this small sum shall have been paid, the company will stand charged with no other indebtedness but its *mortgage bonds*. The holders of these mortgage securities may now look forward to an early receipt of their interest regularly, either in whole or in part. A *moderate increase* over the business of 1862 will enable us to pay a full year's interest, and the prospects now strongly indicate that increase.

The repairs and improvements of the road for the year 1862 are as follows:

New cross ties used during the year, 37,771; 227 perches of masonry have been built at Louisville and other points.

New iron used during the year.....141 tons
Old iron re-rolled during the year.....100 "
T rail spikes used.....8 "
Wrought iron chairs.....8,079
Cast-iron.....200
T rails repaired.....2,412

A new side track 1,126 feet in length, has been built on Lexington grade, and the side track at Hunt's Mill has been lengthened 482 feet, and a switch placed at the north end. The side tracks at Mount Vernon, Independence and Shelby have been improved by using about 32 tons of T rail in place of strap rail removed. There is now on hand 102 tons of T rail that can not be repaired, and we have also 14 tons of strap rail not in use. The road between Ankeneytown and Independence and 5½ miles between Mansfield and Shelby, 11½ miles in all, have been thoroughly graveled, and a large quantity of new ties used on that part of the track. A new bridge of one span, 66 feet in length, has been built over the Black Fork Creek, north of Shelby, and eleven small bridges at different points, of an aggregate length of 396 feet. Twenty-three cattle-guards and small culverts have been rebuilt between Shelby and Ankeneytown. The engine house at Newark has been thoroughly repaired, the bridge north of Fredericktown has been covered, the How's truss bridge spanning the Licking creek, north of Louisville, has been protected by placing tin roofs over the cords, both above and below. The freight and passenger platforms at Belleville and Plymouth have been built entirely new. A new wood house has been built at Centerville 192 feet in length. The wood houses at Havana, Pontiac and Huron Junction have been repaired. A new and substantial cribbing has been built from the cribbing east of the engine house at Huron, extending to the mainland, a distance of 125 feet, and from the grain house east, to the foot bridge leading to the light house, 215 feet. The docking surrounding the grain house at Sandusky has been completed, and new sills have been put under the house. The engine house at Sandusky has been almost entirely rebuilt inside. A new, self-supplying water station has been built at Lexington grade, and is one of the best on the road.

Amount of wood on hand January 1st, 1863.....3,600 cords.
Bought during the year.....6,432 "

Total.....10,032
Used during the year.....7,441

On hand Jan. 1st, 1863.....2,591

Cars built during the year are as follows:

1 passenger car.
4 hand cars.
27 box cars.
4 ditching cars.

Number of cars on the road, January 1st, 1863:

10 passenger cars.
74 box grain cars.
41 platform and coal cars.
22 hand cars.
12 stock cars.
5 baggage cars.
50 merchandise cars.
4 line cars.
12 ditching cars.
11 rack cars.

There will be required 35,000 new cross ties 200 tons of new T rail, and 11,650 new chairs, 8 tons of T rail spikes, and 150 tons of old T rail re-rolled, with what can be repaired, to maintain the road in good running order during the present year.

Four hundred perches of masonry should be built at different points. Eleven new bridges of an aggregate length of 450 feet, will be required to keep the bridges perfectly secure. The road between Shelby and Plymouth, and between New Haven and Centerville, should be graveled early in the season. A new water house should be built one mile north of Mansfield, and the water houses at Independence and at Huron Junction should be thoroughly repaired.

The following are the disbursements of the company for the year:

Domestic bonds redemption.....	\$61,550 00
" " interest coupon.....	1 313 76
" " "over due".....	4,522 21
Taxes for 1861.....	5,209 42
Interest and exchange.....	32 32
Real estate.....	50 00
Fencing road.....	90 37
Internal Revenue tax.....	939 96
Old accounts vs. stations charged to profit and loss.....	1,049 61
Expenses.....	159,605 58
Cash on hand Dec. 31.....	11,299 08
	\$245,782 40

The general statement of the company is as follows:

Railway property.....	\$2,309,418 95
Coupon interest account, first mortgage bonds.....	121,650 31
Coupon interest account, first mortgage bonds "Funded".....	105,509 78
Coupon interest account, domestic bonds.....	22,346 76
Interest domestic bonds, over due.....	11,141 15
Freight department, due from stations.....	8,227 29
Ticket dep't, due from gov't for military transportation.....	3,901 55
United States for transportation of freight.....	1,219 55
Individual accounts.....	63 14
Expense account, 1863, stock on hand.....	13,459 25
Cash in treasury.....	11,299 08
	\$2,608,236 72

CONTRA CR.

Capital stock issued.....	\$806,520 19
" due Receiver.....	42,250 00
Bond account, first mortgage.....	1,290,000 00
" " domestic bonds.....	3,800 00
" " "New series".....	20,000 00
Bills payable.....	108 06
special "funded coupons".....	105,509 78
Paymaster's department.....	6,301 30
U. S. Mail Dep't.....	255 44
Freight suspense account.....	276 63
Individual accounts.....	6,610 10
Profit and loss.....	326,315 32
	\$2,608,236 72

The officers of the company for the ensuing year are as follows:

Directors:—Wm. Durbin, Sandusky, Ohio; Wm. P. Chapman, Sandusky, Ohio; John W. Sprague, Huron, Ohio; Samuel M. Robinson, Plymouth, Ohio; Robert McComb, Mansfield, Ohio; H. P. Warden Mt. Vernon, Ohio; Jas. E. Woodbridge, Mt. Vernon, Ohio; Jerome Buckingham, Newark, Ohio; James Lyon, Hebron, Ohio.

Wm. Durbin, *Pres't.* and *Supt.*; John W. Sprague, *Sec'y.*; Wm. P. Chapman, *Treas.*; Alex. H. Barber, *Gen. Ticket and Frt. Agt.*; James H. Stewart, *Asst. Supt.*; Thos. Hogg, *Master Mechanic.*

The following are the earnings of the Galena and Chicago Railroad Company for the fourth week in January:

1-62.....	\$37,030 00
1863.....	39,277 00

Increase.....\$2,247 00

The month shows a gain of \$20,000.

PENNSYLVANIA R. R.

The year 1862 will long be remembered in the history of railroads as one of unexampled prosperity. When the Railroad Record, in the beginning of the civil war, predicted exactly the state of things that has occurred, many were the doubts and disbeliefs of its readers. But time has passed, and the croakers have been convinced, by actual facts, that our opinions, then expressed in opposition to the universal fears of our cotemporaries, were correct. The railroads of the loyal States have been prosperous; and none more so than the Pennsylvania R. R. The following are the earnings of this line for 1862:

EARNINGS.

From passengers, 1st class.....	\$1,684,433 85
From emigrants.....	46,958 35
	\$1,731,392 20
U. S. troops.....	379,393 21
U. S. mail.....	74,773 43
Expresses under contract.....	\$75,154 00
Extra express freight.....	71,731 96
	146 851 96
Freight.....	7,668,419 85
Miscellaneous sources.....	303,460 31
Total earnings.....	\$10,304,290 96

The cost of operation for the year was as follows:

EXPENSES.

For conducting transportation.....	\$1,313,137 17
New buildings and extensions.....	7,322 01
	\$1,320,459 18
Motive power.....	\$1,430,665 69
New tools and machinery.....	14,409 33
New locomotives added to stock.....	378,930 95
	1,824,005 37
Maintenance of road.....	\$1,004,922 53
New second track and siding.....	341,039 14
	1,345,961 67
Maintenance of cars.....	\$387,255 67
New cars added to stock.....	480,077 06
	867,332 13
General expenses.....	73,313 64
Total.....	\$5,431,072 59
Leaving for net earnings,	\$4,873,218 37.

The gross revenues of the line this year are equal to 28,783 per mile of road (358 miles,) and exceed, in the aggregate, those of 1861, \$3,004,290 01. This is made up by an increase of \$325,373 79 for passengers and emigrants; of \$234,235 07 for troops; \$2,270,394 29 for general freights, and \$174,286 86 for express and miscellaneous freights. The whole number of passengers carried over the road during the year was 1,143,418, averaging a distance of 72½ miles for each passenger. The number of tons of freight moved (including 164,503 tons of fuel and other materials transported for the company) was 2,223,051, embracing 835,146 tons of coal. The increase in the coal traffic is 130,392 tons, and the whole tonnage of the line over that of the last year, 602,575 tons.

The following are the earnings of the Pennsylvania R. R. for the past five years:

EARNINGS.

1858.....	\$5,185,330 61
1859.....	5,362,355 29
1860.....	5,932,701 42
1861.....	6,543,720 46
1862.....	10,304,290 96

It will thus be seen that while there has been a constant increase in the earnings of the road during the whole period, the past year has outstripped all previous ones in the ratio of increase, and has given the road

enormous net income. The President in his report thus alludes to a very important enterprise:

Since your last annual meeting, legislation has been obtained from Congress, and from Virginia, authorizing the extension of the Pittsburgh and Steubenville Railroad across Brooke county, in the State of Virginia, and the Ohio river. The work of constructing the road and its bridges has been vigorously commenced, and will be steadily prosecuted to completion. When finished and connected with our road, it will give us a line from Pittsburgh to Cincinnati 24 miles shorter than any existing route, and free from the vexatious interruptions which have heretofore prevented the full development of our south-western passenger traffic. The completion of this line will also enable the Steubenville and Indiana Railroad Company to provide the means to meet the annual interest upon its bonds guaranteed by this company, which have for several years been a tax upon its revenue.

MICHIGAN SOUTHERN & NORTHERN INDIANA R. R.

The annual report of this company, made to the State authorities of the State of Michigan, gives the condition of the consolidated companies, Dec. 1, 1862.

The length of roads and branches of these companies in operation in the States of Michigan, Ohio, Indiana and Illinois is 441 miles; beside which they operate the leased lines of the Erie and Kalamazoo Railroad, and of the Detroit, Monroe and Toledo Railroad, and use in common with the Detroit, and Milwaukee Railroad Company, three miles of their track at the Detroit terminus; in all eighty-five miles additional.

The total cost of construction of the consolidated lines was \$13,616,404 80, of which \$9,018,200 was paid up capital stock. The funded debt is \$9,608,063, and includes \$791,563 of the Detroit, Monroe and Toledo Railroad bonds, and \$236,000 Erie and Kalamazoo Railroad bonds. The whole floating debt of the company is \$424,116 16. Of the loans of the company \$7,653,000 were made for the purpose of constructing the roads of the consolidated companies.

The following are the earnings of the company for the year:

EARNINGS.

Receipts from Freight.....	\$1,660,937 54
From passengers.....	796,378 49
From all other sources on operating account.....	92,139 27
Total.....	\$2,479,455 30

The expenditures for the year were:

EXPENDITURES.

For repairs of road.....	\$329,678 56
Repairs of engines and cars.....	200,360 06
Other operating expenses.....	671,649 56
Expenditures for construction.....	14,394 21
Total.....	\$1,216,082 19

The number of engines used by the company is 83, passenger cars 82, freight cars 1,

160, other cars 51. The number of through passengers was 61,749; of the way passengers 298,173½. Average number of men employed last year, about 1,750. The number of miles run by passenger trains was 695,001; by freight trains 1,144,037; by other trains 184,355.

It is understood that the floating debt will all be extinguished before the annual meeting of the company. And we believe it is also claimed that a small dividend will be paid to the preferred stockholders.

STEALING BAGGAGE.

A continuous and systematic course of baggage stealing has been practiced for some time past on the Hudson River Railroad. Many an unsuspecting traveller, relying upon his baggage checks, has been coolly informed by the baggage master that there were no such pieces of baggage on the train as his checks called for.

The thieves did up the business very adroitly, for although the officers of the road have been aware, for over a year past, of the fact that much baggage was constantly changing, they have so far succeeded in detecting but one of the guilty parties. The depredations have of late been so frequent and serious that the company determined to make an effort to discover the thieves, and accordingly two baggage-masters, one brakeman, and two express men were arrested by the police of the twentieth precinct, at the Thirteenth street depot of the Hudson River Railroad, New York, on suspicion of being concerned in some way with the robbery of a large number of trunks and other goods from the baggage department of the road, and locked up in the twentieth precinct station-house. This did not seem to have the desired effect, for after these arrests other trunks were missing. Finally, a young man named Shear, who has been in the habit of riding up and down the road for the last year, and who has been employed to deliver bundles of newspapers at the various stations along the line for his uncle, L. N. Shear, news agent, was arrested, having been caught in the act. It appears that for the last twelve months he, having "the run of the cars," became thoroughly familiar with the baggage department, and was in the habit of stealing sets of checks from the string of the baggage-master; that he would then go into the baggage-car, take the checks off the trunks and packages for which the owners had the duplicates, put on a new check, the duplicate of which he put in his pocket and gave to some, at present, unknown confederates, who would then go and receive the checked baggage, leaving the real owners, in a large number of cases, with duplicates in their possession, for which, when presented, the baggage masters could find no corresponding checks on their baggage. The employees on the road who

had been arrested were taken before justice Quackenbush, at the Jefferson Market Police Court, and held to bail; but young Shear was retained at the station-house, in the hope that, meantime, the officers might succeed in finding the gang with whom it is supposed he was working. After being in the station-house but a few days, Shear also obtained "the run of the station-house," took his coat off, rolled up his shirt-sleeves, as if to wash himself, bid the sergeant in charge "good bye," and absconded, since which time he has not been seen.

The stupidity which has allowed the escape of the guilty man, in this instance, is only equalled by that which allowed such a crime as open robbery to be carried on for the whole past year. We trust that at last a stop will be put to this system of depredation on travellers.

ATLANTIC AND GREAT WESTERN R. R.

This road is making rapid progress, and is to be pushed forward vigorously. It is now completed to Akron, in this State. The Meadville Republican gives the following notice of the progress of the work:

The eastern terminus of the road is at Salamanca, 416 miles from the city of New York, where it forms a junction with the Erie Railway. The route is thence westward, through Jamestown, N. Y., Meadville and West Greenville, Penn., Warren, Ravenna, Akron, Millersburg, Gallion and Marion to Dayton, O., sixty miles east of Cincinnati, by which it will connect with the St. Louis road forming in the whole a line of 1,200 miles, of a continuous six foot gauge.

The work on this road was commenced in May, 1860, and was finished to Corry, sixty miles from Salamanca, by May, 1861. At this point work was suspended until the Spring of 1862, when it was again resumed; and in some nine months after we are permitted to record its completion to Akron, a distance of 140 miles from Corry, and 201 miles from the Junction with the Erie Railway. But this is not all, for within the same period a branch has been extended from Corry to Titusville, a distance of 26½ miles. When the nature of the country through which the road passes is considered, we believe the work accomplished by this company since operations were resumed last spring, has no parallel in the history of railroads in this country. The cost is estimated at \$47,000 per mile, including the rolling stock.

At Akron will be the centre of a great wheat and cattle region, and the point of transshipment from the Ohio Canal by which the 40 miles of roundabout water communication will be saved. Again at Mansfield, 65 miles from Akron, a connection is secured with the Pittsburgh, Ft. Wayne and Chicago Railway, forming the quickest route with only one change

between New York and Chicago, and so Gallatin fourteen miles west with the Bellfontaine and Indiana, and the Cleveland and Cincinnati, both important lines, and thus unavoidably becoming leaders of the Atlantic and Great Western. In its continuation at Dayton, it joins the Cincinnati, Hamilton & Dayton line, which is to widen its gauge and unite. Indeed, after passing the meridian of Cleveland, it cuts at various angles more than a dozen great lines of railways tending northwardly and southwardly, offering them the easiest grades and most direct routes to New York.

A branch to Franklin will be completed by July next, and also one of the coal fields at Sharon, Mercer county, at the same time. The former will find a heavy demand made upon it by shippers of oil, as the branch now running from Corry to Titusville has. And the increased shipments of coal as exhibited by the returns made from the coal fields of Mercer county, show the importance that must be attached to this branch of business.

All the country through which the road passes is populous and fertile, rich in the products of the fields, the forests and mines; and there cannot be a doubt that it will be of great benefit to the country, as well as a profitable investment to the stockholders.

The work on the road west of Akron will be continued in the spring, by the present contractor, James McHenry, Esq., for the Ohio Company, and completed through to Dayton within the year.

EUROPEAN RAILWAYS.

The *London Engineer* has some very interesting remarks on the construction of railways and the machinery used on them, suggested by the experience of the past. The *Engineer* says:

Independently of the annual repairs upon a railway, which arise from the casual fracture and failure of the road structure, the rails and other iron work of the road are subject to a gradual and slow but not insensible wear and tear, arising from the continual motion of the vehicles upon the road. Not one of these vehicles passes over a rail without detaching from its surface more or less of the metal which composes it; and when the enormous number of these vehicles which pass over a railway in active traffic is considered, the wonder will be not that the rails are subject to wear, but that their durability is as great as it proves to be. Yet strange to say, the prevalent opinion, countenanced and supported by the most eminent practical engineers, was, until a late period, that the duration of a railroad was secular, and that the wear and tear of the rails was so utterly insensible, that for all practical, financial, and economical purposes, it might be totally disregarded. Thus, it was said that the rails of a properly laid line would last from one hundred to one hundred and fifty years. Such statements are examples of how small value are opinions of practical men not based upon their own immediate experience.

The only sure ground on which to calculate

the average duration of the life of the rails would be from a careful record of the effects observed on railways under traffic for periods of time of sufficient length; but for this we should possess more extended experience than railways have yet furnished.

The modern railway may be dated from the opening of the Liverpool and Manchester line in 1830. Its duration, consequently, has not yet covered a space of twenty years. Unless, therefore, the average life of the rails were less than twenty years we could not determine as yet its duration from the immediate results of experience. No rails, in fine, have yet lived out their natural lives.

In the absence, however, of the direct evidence of experience, we may reason from analogy.

If, for example, the rails originally laid down on some of the lines first brought into operation be taken up and weighed, their weight having been accurately ascertained at the time they were laid, their loss of weight might be determined. The traffic which has passed over them might also be ascertained.

The cause and effect would thus be brought into immediate juxtaposition, and we should possess data, by which the wear and tear of a rail, produced by a given amount of traffic passing over it, might be known. This being determined, the only question remaining would be, what loss of weight a rail must sustain before it would be necessary to replace it by a new one.

The circumstances attending the construction and operation of the railways hitherto established have, however, thrown great difficulties in the way of such an inquiry. When the railways were first projected, the amount of traffic which they were destined to bear was not foreseen; still less was it known with what speed such traffic must be carried, or by what description or weight of engine it should be propelled. Nevertheless, all these circumstances vitally affected the duration of the rail. The engineers who constructed the road were therefore obliged to provide a structure endowed with strength for a traffic unknown in amount. The conditions of weight and strength to be imparted to the rails were altogether conjectural.

The first railway for passenger traffic with locomotive engines was accordingly laid between Liverpool and Manchester, with rails of the description called fish-bellied, now out of use, weighing 35 lbs. per yard. The strength of these was at the time considered great to superfluity, and this form was regarded as eminently favorable to their durability.

Experience soon proved their weight to be utterly insufficient, and their form to be a source of weakness.

The first engine run upon this line thus constructed weighed 7½ tons including the tender.

It was soon found, however, that engines of this power were altogether insufficient for the traffic, which increased beyond all the estimates of the projectors of the line.

The capability of speed developed by the locomotive engine also vastly exceeded all provisions, and the appetite of the public for even augmented expedition appeared to increase with what fed it. Increased speed required increased power, and increased power necessarily inferred increased weight. It was, accordingly, not long before the weight of the engines was successively augmented to 10, 12, and 15 tons; and now there is actually an engine on one of the English railways which, with its tender, water and fuel weighs about 60 tons; and in the service of a single company there are at present more than 36

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION.

Name of Company.	Location.	Quotation of Stock.	Length of Road.	Capital paid in.	Total Funded Debt.	Floating Debt.	Gross Earnings.	Net Earnings.	Date of Report.	Description of Bond.	Amount.	Rate of Int.	Quotation of Bond.	Due.	Where Payable.
Atlantic and Great Western.....	N.Y. & Pa.	89 1/2	48	\$	\$	\$	\$	\$	Sept. 30, 1860	Maryland Sterling.	3,000,000	5			
Baltimore and Ohio.....	Md.	380		13,111,800	10,781,833	566,077	3,922,203	2,305,788		Mortgage.....	2,500,000	6	107 1/2	1885	
do do										"	700,000	6	110 1/2	1880	
do do										"	1,125,500	6	108	1875	
do do										"	1,000,000	6	109	1867	
do Washington Branch.....	Md.		30	1,650,000						1st Mortgage.....	791,000	7	55	1866	
Bellefontaine and Indiana.....	Ohio & Ind.	118		1,859,813	1,256,750	139,129	314,000	8,795	Dec. 1860.	2d ".....	160,000	7		1870	
do do			68	1,950,950	1,049,000	27,545	911,019	498,047	June 30, 1860						
Buffalo and State Line.....	N.Y. & Pa.	60								1st Mortg. 1st Div.	595,000	6		1864	
do do			75	1,101,432	1,428,000		104,869	21,073		1st Mortgage.....	27,000	6		1861	
Burlington and Missouri.....	Mo.	138	96	3,798,400	8,880,000		1,997,065	733,950	Dec. 31, 1860.	1st Mortgage.....	800,000	7	105	1864	
Camden and Amboy.....	N. J.									2d ".....	80,000	7	76	1865	
Central Ohio.....	Ohio.	137		In hands of Receiver.	3,673,000	1,126,438	597,633	71,356	Aug. 1, 1859	3d ".....	950,000	7		1865	
do do										4th " S. F.....	1,365,800	7	30	1876	
do do										1st Mortgage.....	1,400,000	7	106	1865 & 1870	
Central of New Jersey.....	N. J.		64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.	2d ".....	600,000	7	100	1875	
Chicago, Alton and St. Louis.....	Ills.	85	222	In hands of Receiver.	6,168,520	730,000	994,569	225,787	Dec. 31, 1860.	1st Mortgage.....	2,100,000	7			
do do										2d ".....	1,535,000	7			
Chicago and Milwaukee.....	Wis.			No report received.						3d ".....	1,000,000	10			
do do										1st Mortgage.....	400,000				
Chicago and Northwestern, (formerly Chicago, St. Paul and Fond du Lac)...	Wis.	22	104	2,897,756	7,335,493	50,386	720,705	230,119	Apr. 1, 1861.	2d ".....	200,000				
do do										Pref. 1st Mor. & S. F. Gen'l 1st Mortgage.	1,250,000	7	101 1/2	Feb. & Aug.	
do do										2d ".....	3,600,000	7	72	Feb. & Aug.	
Chicago and Rock Island.....	Ills.	89	175	5,603,000	1,397,000		1,164,018	455,963	June 30, 1861	2d ".....	2,100,000	6	44	May 1.	
Chicago, Burlington and Quincy.....	"	106 1/2	138	4,689,340	4,814,515		1,514,428	761,830		1st Mortgage.....	2,000,000	7	118	1870	
do do										Cons. 1st Mort. S. F.	2,172,000	8	125	1883	
do do										" 2d " S. F.....	813,000	8	113	1890	
do do										1st Mor. Chi. & Aur.	390,000	7		1867	
do do										2d ".....	303,000	7		1869	
do do										1st "Cent. Mil. Tract	397,000	7		1864	
do do										2d ".....	245,000	8		1868	
Chicago, Iowa and Nebraska.....			82	No report											
Cincinnati and Chicago Air Line.....	Ind.														
do do															
Cincinnati, Hamilton and Dayton.....	Ohio.	125	60	2,155,800	1,356,000		644,228	174,595	Mar. 31, 1861	1st Mortgage.....	441,000	7	100	1867	
do do										2d ".....	950,000	7	100	1880	
Cincinnati, Wilmington & Zanesville ..	Ohio.		132	In hands of Receiver.	2,241,500		202,402	71,921		1st Mortgage.....	1,300,000	7			
do do										2d ".....	532,000				
do do										3d ".....	104,000				
do do										Income.....	305,500				
Cleveland and Mahoning	Ohio.	68 1/2		1,167,473	1,712,000	289,665	375,691	233,173	Dec. 31, 1861.	1st Mortgage.....	850,000	7	80		
do do										2d ".....	439,000	7			
do do										3d ".....	341,000	8			
Cleveland and Pittsburgh.....	Ohio & Pa.	66	196	In hands of Receiver.	4,918,325	653,821				1st Mortgage M. L.	800,000	7	105	1860	
do do										2d " M. L. or 1st Ex.	1,185,000	7	103	1873	
do do										3d 2d Ex.....	1,163,000	7	103	1865	
do do										4th 3d Ex.....	1,154,000	7	81		
Cleveland and Toledo.....	Ohio.	84 1/2	148	3,343,800	3,850,570	196,413	919,971	493,956	May 31, 1861.	1st Mor. Jun. 1st Div.	359,000	7	103 1/2	1867	
do do										1st " " 2d Div.	263,000	7		1872	
do do										2d " ".....	265,000	7		1862	
do do										1st " Tol. Nor. & Clew	521,000	7		1863	
do do										2d " ".....	293,309	7		1864	
do do										Junction Income.....	44,500	7		1862	
do do										C. & T. Income.....	300,000	7		1864	
Cleveland, Columbus and Cincinnati.	Ohio.	161	135	4,746,100	519,000	4,201	1,235,003	664,888	Dec. 31, 1861.	1st Mortgage.....	519,000	7		1864 & 1890	
Cleveland, Painesville and Ashtabula..	"	165	98 1/2	3,000,000	1,602,000	none	1,063,403	633,647	Nov. 15, 1860	1st Mortgage.....	564,000	7	106	1861	
do do										2d ".....	303,000	7		1862	
Columbus and Xenia.....	Ohio.	115	54 1/2	1,490,000	290,700	50,500	See L.	Miami.		Dividend.....	272,700		100	1860 to 1866	
Columbus, Piqua and Indiana.....	"		103	In hands of Receiver.	2,512,000	292,267	375,002	212,107	Mar. 31, 1860.	1st Mortgage.....	300,000	8			
Dayton and Michigan.....	"		142	2,176,666	2,512,000	292,267	375,002	212,107		2d ".....	2,212,000	7			
Dayton and Western.....	Ohio.	38		307,240	716,000	80,845	62,023	3,565	Aug. 31, 1860	1st Mortgage.....	300,000	7	50		
Detroit and Milwaukee.....	Mich.	186		No report						1st Mortgage.....	2,500,000	7	90	1875	
do do										2d ".....	1,000,000	8		1866	
Dubuque and Sioux City (formerly Dubuque and Pacific).....	Iowa.	111		No report											
Dubuque, Marion and Western.....	Ohio.	51		No report											
Eaton and Hamilton.....	Ohio.	36		469,762	728,853	152,694	152,328	43,865	Dec. 31, 1860.	1st Mortgage.....	757,734				
Evansville and Crawfordsville.....	Ind.	132		986,061	1,219,100	249,668	124,140			2d ".....	400,000				
Fox River Valley.....	Wis.			Operated by Galena & Chicago Union.						1st Mortgage.....	180,000				
Galena and Chicago Union.....	Ills.	91	121	6,028,300	3,524,200	none	1,462,752	652,260	Dec. 31, 1860.	1st Mortgage.....	1,993,000		120	1862 & 1863	
do do										2d ".....	1,320,000		100	May 1, 1875	
Great Western	Ills.	175		1,600,000	2,391,000		485,943	181,529	May 31, 1861.	1st Mortgage W. D.	1,041,000	10			
do do										1st " E. D.	1,350,000	7			
Green Bay, Milwaukee and Chicago...	Wis.	84		400,000	No report	75,000	63,141	13,573		Land Mortgage...	5,000,000		88		
Greenville and Miami.....	Ohio.	32		300,000	473,000					Mortgage Conv.....	1,354,000		67		
Hannibal and St. Joseph.....	Mo.	206		1,041,086	10,554,000	220,336	996,907	512,933	Sept. 1, 1860.	1st Mortgage.....	927,000	6		1873	
Hartford and New Haven.....	Conn.	62		2,350,000	927,000	13,336	712,876	354,136	Aug. 31, 1861	2d ".....	4,000,000	7	118	1869 & 1870	
Hudson River.....	N. Y.	92	144	3,738,466	9,107,000	182,106	2,047,145	778,121	Sept. 30, 1860	3d S. F.....	2,000,000	7	114 1/2	1875	
do do										3d ".....	1,840,000	7	114	1875	
Illinois Central.....	Ills.	92	455	15,654,980	15,672,240		2,778,333	1,128,640	Jan. 1, 1860.	Optional.....	88,000	7	126	1868	
do do										Construction.....	12,885,000	7	115	1875	
do do										".....	4,115,000	6	100	1875	
do do										Debentures.....	42,740	7	100		
Indiana Central.....	Ind.			611,050	1,216,700	40,550	400,397	207,200	Jan. 1, 1860.	1st Mortgage.....	60,000	7			
do do										2d ".....	578,000	10			
do do										Income.....	38,700	10			
Indianapolis and Cincinnati.....	Ind.	110		1,689,900	1,362,284	140,689	448,858	230,834		1st Mortgage.....	500,000	7		1866	
do do										2d ".....	400,000	7	90		
do do										Real Estate Mort.....	200,000	7	90		
Indianapolis Pittsburgh and Cleveland	Ohio.	84		835,971	1,023,284	9,936	277,952	36,773	Dec. 31, 1860.	2d ".....	649,884				
do do											314,000				
Iowa Central Air Line.....	Iowa.			245,000	755,000		No report								
Iron.....	Ohio.	13		118,865	50,000		No report								

RAILROAD SHARE AND BOND LIST, CORRECTED WEEKLY UP TO DATE OF PUBLICATION

Name of Company.	Location.	Q u o t a t i o n o f S t o c k	L o a n t o f R o a d	C a p i t a l p a i d i n.	T o t a l F u n d e d D e b t	I n t e r i n g B t.	G r o s s E a r n i n g s.	N e t E a r n i n g s.	D a t e o f R e p o r t.	D e s c r i p t i o n o f B o n d.	A m o u n t	R a t e o f I n t.	Q u o t a t i o n o f B o n d.	D u e.
Iron Mountain.....	Mo.	86½		\$ 1,070,937	\$ 3,501,000	\$ 43,261	\$ 276,931	\$ 70,016	Dec. 1, 1860.	State Bonds.....	3,501,000			
Jeffersonville.....	Ind.			1,015,907	631,000	.....	302,006	122,797	Dec. 31, 1860.	1st 299,000		7	75	1861
do										2d 392,000		7	70	1873
Kentucky Central (Covington and Lexington).....	Ky.	90		Sold out under mortgage	2,930,000	337,532	425,408	227,534		1st Mortgage..... 160,000		6		
do										1st " 260,000		7		
do										2d " Conv. 1,000,000		7		
do										3d " 600,000		7		
La Crosse and Milwaukee.....	Wis.	200		In hands of Receiver.						1st Mortgage E. D. 903,000		89		
do										2d " E. D. 1,000,000				
do										1st Land Grant W D 4,000,000		21		
Lafayette and Indianapolis.....	Ind.	64		1,000,000	600,000		No report			1st Mortgage..... 130,000		6		
Lexington and Frankfort.....	Ky.	29		514,433	130,000		104,914	43,267	June 30, 1861	1st Mortgage..... 1,300,000		6		1863
Little Miami.....	Ohio.	65					1,330,050	529,981	Jan. 1, 1862	City Loan..... 174,000		6		
Louisville and Frankfort.....	Ky.	65		1,169,59	384,519		245,910	98,679	June 30, 1861	1st Mortgage..... 248,000		7		
do										1st Mortgage..... 2,000,000		7		
Louisville and Nashville.....	Ky.	268		5,631,469	3,260,500	348,075	807,934	461,970	July 1, 1861.	1st " Lebanon Br. 400,000				
do										1st " Memphis Br. 500,000				
Louisville, New Albany and Chicago..	Ind.	238		2,800,000	3,000,000	200,000	645,827	371,402						
do														
Madison and Indianapolis.....	Ind.	87		1,648,050	1,285,300	87,969	230,503	99,080	Dec. 31, 1860.	1st Mortgage..... 600,000		7		1861
Marietta and Cincinnati.....	Ohio.	208		8,561,213	190,468	108,150	430,649	78,800	Aug. 1, 1861	1st Mortgage Conv 2,500,000		7		1868
do										2d " 2,000,000		7		
do										3d " 1,500,000		7		
do										Sterling Income..... 333,000		4		
Michigan Central.....	Mich.	94	284	6,057,784	7,968,489	125,000	2,126,699	910,169	May 31, 1861	Domestic 928,617		6	98½	1872
do										1st Mortg' Sterling 467,483		8	128	1869
do										1st " Conv. 500,000		8	96	1860
do										1st " unconv. 250,000		8	106	1869
do										1st " Dollar Conv. 2,598,000		8	128	1862
do										1st " S. F. Conv. 4,153,000		8	108	1860
Michigan South'n & North'n Indiana	Mich &	57	246	9,018,200	9,714,704	437,886	2,075,450	1,039,829	Mar. 31, 1861.	Mort. Mich. So. 991,000		103		1861
do	Guaranteed	104								" Nor. Ind. 985,000		100		1863
do										" Goshen Line. 1,168,000		113½		1865
do										S. F. Toledo 2,550,000		103		1877
do										2d Mortgage 2,465,000				
Milwaukee and Chicago.....	Wis.	40		1,000,000	600,000	246,365	159,456	82,182		1st Mortgage..... 400,000		8		
do										2d " 204,000		7		
Milwaukee and Horicon.....	Wis.	42		1,101,200						1st Mortgage..... 420,000		8		
do										2d " 600,000		8		
Milwaukee and Prairie du Chien....	Wis.	238	192	4,944,000	2,556,000		683,186	439,943	Dec. 31, 1860.	1st Mortgage..... 2,556,000		7	111	1891
Milwaukee and Western.....	Wis.	71		No report						2d Mortgage Conv. 1,000,000		7		
Mississippi and Missouri.....	Iowa,	55		No report						1st " S. F. 400,000		8		
do										Oskaloosa Div. 1,425,000		7		
do										Land Grant..... 7,000,000		7		
New Jersey.....	N. J.	34		4,397,800	688,000		992,767	579,981	Dec. 31, 1861.	Mortgage..... 711,000		109		
New Jersey Central.....	N. J.	155	64	2,200,000	3,186,000	175,000	1,185,847	710,396	Dec. 31, 1860.					
New York and Erie Pref.....	N. Y.	100		Sold			5,590,916	1,979,408	Sept. 30, 1860.	1st Mortgage..... 3,000,000		125		
do	do common, ..	74		under mortgage						2d " 4,000,000		125		
do										3d " 6,000,000		115		
do										4th " 4,900,000		113		
do										5th " 1,792,500		107		
New York and Harlem Pref.....	Conn.	64	138	5,717,190	6,055,752	.....	1,142,251	433,716	Sep. 30, 1860.	1st Mortgage..... 2,950,000		7	119	1873
do	common	33								2d " 1,000,000		7	105	1864
New York and New Haven.....	Conn.			3,000,000	1,990,000	108,038	925,075	325,573	Apr. 1, 1861.	Mortgage..... 912,000		7	94	Dec. 1, 1866
do										" 978,000		6	116½	Oct. 1, 1875
New York Central.....	N. Y.	120	556	24,000,000	14,613,005	none.	7,309,042	2,661,152	Sept. 30, 1861.	Cons. Cert. to St. H. 7,925,000		6	117	May 1, 1883
do										Mortgage..... 3,000,000		6		June 15, 1864
Northern Central.....	Md.	3½	138	2,260,000	5,890,300	537,926	1,018,103	283,627	Dec. 31, 1860.	Construction..... 2,006,500		6		
North Missouri.....	Mo.			2,443,736	4,350,000	93,796	400,008	96,731	Nov. 1, 1860.	State Loan..... 4,550,000		6		1885
Ohio and Mississippi, Eastern Div....	Ohio & Ind	192		Leased.	9,680,000	2,330,030	898,817	153,669	May 1, 1861.	1st Mortgage..... 2,193,500				
do										3d " 316,995				
do										Construction..... 4,637,920				
do										Income..... 3,591,185				
Ohio and Mississippi, Western Div....	Ills.	148		.....	3,292,403		No report			State Loan..... 7,000,000		6		
Pacific.....	Mo.			3,199,662	7,000,000	334,282	672,181	303,627	Sept. 30, 1860.	" S. W. 2,800,000				
do										Construction..... 4,500,000		6		
Pennsylvania.....	Pa.	359		13,261,060	17,163,947	367,489	7,300,000	3,646,938	Dec. 31, 1861.	1st Mortgage Conv. 4,903,000		6	104½	1888
do										2d " 2,319,000		6	98½	1875
do										2d " Sterling 1,937,440		5	80	1875
do										State Works..... 7,200,000				
Peru and Indianapolis.....	Ind.	74		1,100,000	820,000	80,000	No report			1st Mortgage..... 2,300,000		6	99½	1884
Philadelphia, W. and Baltimore.....	Del.	50	98	5,600,000	2,300,000		1,236,597	471,712	Oct. 31, 1860.	Improvement..... 119,000		6		1863
Pittsburgh, Ft. Wayne & Chicago..	Ohio, Ind. & Ills.	65	467	Sold for Floating Debt.	10,192,155	1,757,273	2,335,353	761,555	June 30, 1861	1st Mort. O. & P. 1,000,000		7	117½	1865
do										2d " 750,000		7	106	1866
do										1st " O. & T. 1,000,000		7		1872
do										2d " 380,000		7		1873
Pittsburgh and Connellsville.....	Pa.	40		1,751,826	1,292,700	67,869	80,553	29,690	Oct. 31, 1860.	Pittsburgh Subs'n. 500,000				
Racine and Mississippi.....	Wis.	104		2,705,720	1,417,900	1,085,338	220,850	68,438	May 10, 1861.					
Sandusky, Dayton and Cincinnati..	Ohio.	170		2,697,090	2,683,384	58,975	450,245	58,588	June 30, 1861	1st Mortgage..... 125,000		10		1856
do										" 907,000		7		1866
do										" 1,000,000		7		1875
Sandusky, Mansfield and Newark....	Ohio.	125		848,770	1,395,260	132,063	195,934	34,167	Dec. 31, 1860.	1st Mortgage..... 1,290,000		7		1886
Scoto and Hooking Valley.....	Ohio.	50		404,975	500,000	100,000								
Springfield, Mt. Vernon & Pittsburgh..	Ohio.	50		1,000,000	1,050,000	200,000		53,100		1st Mortgage..... 500,000		7		
do										2d " 450,000		7		
Steuensville and Indiana..	Ohio.			No report						1st Mortgage..... 1,500,000		7		1870
do										2d " 900,000		7		1865
Terre Haute, Alton and St. Louis....	Ills.	33	208	No report						1st Mortgage Conv. 1,000,000		7	108	1862
do	Preferred	68								2d " Conv. 2,000,000		7	91	1868 & 1870
do										1st " Bel. & Ill. 517,000		7		1873
Terre Haute and Richmond.....	Ind.	105	73	1,381,450	220,000	none.	377,692	216,183	Dec. 1, 1861.	1st Mortgage..... 230,000		7	106	1866
Toledo, Wabash and Western.....	Ohio & Ind	50	243	2,123,506	5,996,049	52,389	233,546			1st Mortgage..... 3,400,000		7	92½	Aug. 1, 1865
do	Preferred	80								2d " 2,500,000		7	92	Nov. 1, 1878
										Mort. Coupons.... 98,040		7		1860 to 1865

engines, weighing, with their tenders, about 40 tons each.

The weight of the carriages underwent a corresponding though not proportionate increase. The first carriages placed on the railways weighed from 3 to 3½ tons; their weight now sometimes exceeds 4½ tons.

The strength and weight of the goods wagons have undergone a like change.

But these were not the only circumstances which rendered the rails originally laid inadequate in strength. The quantity of traffic and its speed were gradually increased far beyond any limit which had entered into the contemplation of the engineers who projected and constructed the roads. Thus the average speed of the passenger trains, which in 1831 was 17 miles an hour, was gradually increased, until in 1848 it was 30 miles an hour; while the speed of the fastest trains, which in 1831 was 24 miles an hour, was in 1848, on the Liverpool and Manchester line, 40 miles an hour, and on the Grand Junction and the Liverpool and Birmingham 50 miles an hour.

In 1837, the number of trains per day which arrived at and departed from the Stafford station, on the Grand Junction Line, was 14; in 1848 it was 38. The number of trains per day which arrived at and departed from the Euston square station of the Birmingham line in 1837 was 19; in 1848 it was 44.

In fine, the number of trains per day arriving at and departing from the Liverpool terminus of the Liverpool and Manchester Railway in 1831 was 26; in 1848 it was 90.

A corresponding augmentation took place in the weight of the trains. In 1831, the average weight of a goods train, including engine and tender, was 52 tons; in 1848 it varied from 160 to 176 tons.

Thus the number of trains on some railways was augmented 150, on others 250 per cent; the weight of the engines was increased 114 per cent; the weight of the carriages 30 per cent; the average speed about 90 per cent; and the average weight of the trains 350 per cent.

For such increased work the rails originally laid down at 35 lbs a yard would have been totally inadequate, and they were accordingly soon replaced by others which weighed 50 lbs. These, again, under the gradually increasing traffic, being found insufficient, were taken up, and successively replaced by rails weighing 62 lbs and 65 lbs. These were succeeded by others weighing 72 lbs and 75 lbs; and the latest rails laid down have weighed 85 lbs.

These changes were not made suddenly. The weight and strength of the permanent way were gradually increased, under the gradually increasing traffic; and, at present, the principal railways exhibit a motley arrangement of rails of various weights, the lightest being 69 lbs and the heaviest 85 lbs per yard.

Thus, on 438 miles of railway, placed under the direction of the Northwestern Company, there were at the commencement of the present year (1849), about 150 miles laid down with rails of 75 lbs per yard, 100 miles at 65 lbs per yard, and the remainder, in detached lengths varying from 50 to 70 miles, with rails of 60 lbs to 85 lbs per yard.

In a joint report of Messrs Stephenson and Locke, dated April, 1849, the company is recommended to adopt for the future the heaviest description of rails, viz., 85 lbs per yard.

The mode originally adopted for supporting the rails was upon square blocks of stone, measuring 2 feet in the side and one foot in depth, upon which a cast iron chair was fastened by wooden pegs driven into holes bored

in the stone block, the rail being fixed in the chair by an iron pin.

After a time, these stone blocks were superseded by transverse beams of wood called sleepers, which served at once as supports for the chairs and rails, and as ties for keeping the rails in gauge.

The material selected for these sleepers, when first used, was larch, which was considered to be the most durable wood for the purpose, next to oak.

Later, the timber used for sleepers was prepared by impregnating it with certain saline substances, by a process variously denominated, according to the principle and mode of impregnation. Sleepers of soft wood thus prepared were regarded as having a durability equal to that of oak.

It has recently been proposed to substitute sleepers of cast iron for those of wood, and the plan has already been reduced to practice on a large scale.

The distances between sleeper and sleeper were subject to as much variation as were the strength and weight of the rails. At first, the sleepers were placed at 3 feet asunder; the distance was afterward increased from 3 to 5 feet, according to the weight of the rails; and at present the rails are variously laid on supports at 3 feet, 3 feet 6 inches, 3 feet 9 inches, 4 feet, and 4 feet 6 inches asunder.

The cubical magnitude of the sleepers has been subject to similar changes, according to the increasing amount of the traffic.

When these rapid and successive changes, spread over so brief a period as twenty years, are considered, it will be easily understood how difficult a problem is the solution by analogy of the average life of a rail. No rails hitherto laid down have even been, strictly speaking, worn out. They have been successively taken up and replaced, not because they were worn out, but because their strength was insufficient for the increasing amount and speed of the traffic, and the consequently augmented weight of the engines.

If rails, selected in sufficient number, and in positions sufficiently various, had been accurately weighed when first laid down, and the amount and speed of the traffic passing over them had been accurately recorded, and if, after a sufficiently protracted interval, these rails had been taken up and weighed the loss of weight corresponding to the traffic would have been ascertained; but directors and engineers were too actively engaged in the practical working of the line, and too deeply involved in the present interests of their respective concerns, to give themselves much trouble about a problem which was regarded as affecting the interests of their remote successors rather than their own. Few scientific men devoted themselves to these practical operations, and those few could scarcely expect that the directors of railways would allow their current business to be interfered with by experiments and observations, which would necessarily involve labor, cost, inconvenience and even the danger of the temporary displacement of the rails. The problem was therefore left without solution; to vague conjecture.

In Belgium, where the railway system was first adopted on the Continent, it was placed under the superintendence of the government, and was therefore in circumstances more favorable to the investigation of questions having an interest more remote than immediate. We find, accordingly, in the official reports of the Belgian railways, observations on the circumstances which determine the duration of

the permanent way, which throw considerable light on this point.

The durability of the sleepers depends solely upon their intrinsic qualities, without reference to the traffic carried on upon the road. Their deterioration is produced by the gradual deterioration of the timber, by the vicissitudes of moisture and temperature to which it is exposed. The sleepers of the Belgian railways are partly of oak and partly of white wood.

The average duration of the white wood sleepers has been found not to exceed eight years, but the duration of oak sleepers, though much more considerable, does not appear to be ascertained with the same accuracy. The average duration of the entire system of sleepers used on these lines, partly white wood and partly oak, has been found, however, from observations of sufficient extent and accuracy, to be twelve years. No sleepers impregnated with chemical principles have been used on these lines.

It appears to be the result of experience that the sleepers do not perish at the same rate, but that a portion require to be replaced year by year; and the experience of the Belgian lines shows that each year about eight per cent of the sleepers are renewed. Thus, in the course of twelve years, by the gradual annual repairs, all the sleepers are renewed.

Calculations have been made by the Belgian engineers as to the economical advantages derivable from the use of oak sleepers exclusively, instead of the more perishable description of wood. The result of this calculation was, that the ultimate cost was nearly the same, whether the sleeper used be more perishable and cheaper, or more durable and dearer, the increased expense being very nearly equal to the augmented durability. These calculations, however, must vary in their results according to local circumstances, and according to the market price of the material of the sleepers.

EASTERN R. R., MASS.—The earnings of this road for the year ending Nov. 30, 1862, as shown by its annual report, were \$631,307 35. Those of the previous year were \$535,939, showing an increase of \$95,368 35.

The net income for the year ending Nov. 30, 1861, was 189,262 37, and the net income for the past year \$213,537 31. 24,087 more passengers have been transported during the past year than the year previous, the total number being 1,246,502.

The Michigan Southern road reports its business for the year ending Dec., 1862, as follows:

EARNINGS.

Receipts from freight.....	\$1,660,937 54
From passengers	796,378 40
From all other sources on operating expenses.....	671,649 36
Total	\$2,549,455 91

EXPENSES.

Expenditure for repairs of road.....	\$339,678 56
Repairs of engine and cars	209,360 00
Other operating expenses.....	671,649 36
Expenditures for construction....	14,594 21—1,216,282 19
Net earnings.....	\$1,333,173 02
Bonded debt.....	\$9,608,063 00
At seven per cent is.....	672,564 41
Floating debt.....	424,116 16—1,096,680 57
Apparent balance Dec. 1, 1862.....	\$236,492 40

JOHN BRANT, Jr., Superintendent
C. E. FOLLETT,
General Ticket Agent, Richmond, Ind.
S. W. CHAPMAN, Gen. Freight Agent,
3 Sanolpa Street, under Sherman House Chicago Ill

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RAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A. M., Express, and 11, P. M., Express.

On Sundays at 3.30, A. M., and 11, P. M.

Leave Baltimore for the North and West daily, at 8.30; A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail, and 7.00 P. M., Express.

On Sundays at 7, P. M., only.

Through connections made for all points at the North, East and West.

WM. CRAWFORD, Agent.

KNOX & SHAIN,

Engineering and Telegraphic

INSTRUMENT MAKERS,

21 WALNUT ST., PHILADELPHIA.

(Two Premiums awarded by Franklin Institute.)

T. F. RANDOLPH & BRO.

Mathematical Instrument Makers

No. 67 West 6th St. bet Walnut & Vine,
CINCINNATI O.

CHICAGO, GREAT WESTERN AND NORTH-WESTERN LINE—INDIANAPOLIS AND CINCINNATI SHORT-LINE



RAILROAD.

SHORTEST ROUTE BY THIRTY MILES.

No change of cars to Indianapolis, at which place it unites with Railroads for and from all points in the West and North-west.

SUMMER ARRANGEMENTS.

CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily from the foot of Mill, on Front-street. Through to Indianapolis. Terre Haute, Lafayette and Chicago in advance of all other roads.

FIRST TRAIN—5:00 A. M.—Chicago Mail for Indianapolis, Lafayette and Chicago, connecting at Chicago with all Western and North-western trains. Terre Haute train leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—12:45 A. M.—Indianapolis, Lafayette, Springfield, Quincy, Palmyra and St. Joseph Express arrives at Indianapolis, Lafayette, Springfield, Quincy, Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M. Terre Haute and Alton train leaves Indianapolis at 8:20 P. M.

THIRD TRAIN—5:00 P. M. Chicago Express for Indianapolis, Lafayette, Chicago, connecting at Chicago with all Western and North western Trains.

Sleeping cars are attached to all the night trains on line, and run through to Chicago without change of cars. Be sure you are in the RIGHT TICKET OFFICE before you purchase your Ticket, and ask for tickets via Lawrenceburg and Indianapolis.

Fare the same and time shorter than by any other route.

Baggage checked through. Through tickets, good until used, can be obtained at the Ticket Offices north-west corner Broadway and Front sts.; No. 1 Burnet House corner, and at the Depot office, foot of Mill, on Front street, where all necessary information may be had.

Omni-buses run to and from each train, and will call for passengers at all Hotels and all parts of the city by leaving address a either office.

H. C. LORD, President.

W. H. L. NOBLE,

General Ticket Agent.]

C. R. COTTON, Cincinnati Agent.

J. T. CRAPSEY,
ATTORNEY AT LAW,

—OFFICE—

N. W. Cor. Walnut & Sixth Street,
CINCINNATI.

KNIGHT BROS. Consulting Engineers,

—AND—
COUNSELLORS
IN

PATENT CAUSES,

Solicitors of American and Foreign Patents.

Sprague's Bld'g.

OPP. POST OFFICE,

CINCINNATI, O.

W. M. F. HEWSON, STOCK BROKER,

No. 21 West Third Street,
CINCINNATI.

Buys and sells Stocks, Bonds and other Securities on commission only; negotiates Loans and tax collection.

BUSH & LOBDELL, Chilled Railroad Car Wheel, Tyre,

—AND—
Railroad Machine Works,
Wilmington, Delaware,
MANUFACTURE

CHILLED WHEELS

—AND—
TYRES,

FOR RAILROAD CARS

AND
LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

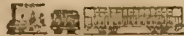
CELEBRATED WHEELS.

Either Single or Double Plate,
With or without Axles.

WHEELS FITTED

To Hammered or Rolled A
In the best Manner, at the Shortest Notice,
Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition

The well-earned reputation of this Road for
SPEED, SECURITY AND COMFORT
Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore conceded to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$1.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

W. P. SMITH, Master Transportation, Baltimore.
J. H. SULLIVAN, Gen. Wagon Agent, Baltimore, O.
L. M. COLE, Gen. Ticket Agent, Baltimore.

ERIE RAILWAY.

Great Broad Gauge, Double Track
and Telegraph Route

TO

**NEW YORK, BOSTON,
AND ALL EASTERN CITIES,**

CARRYING THE

Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston. Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

This Road affords superior facilities for shipment of Freight.

An Express Freight Train

Leaves New York Daily, making close connections through to all points West.

For Freight Rates, enquire of J. C. OATMAN, 240 Broadway, New York; JOHN S. DUNLAP, 15 State Street, Boston, Mass.; or of JACOB FORSYTH, Freight Agent, 64 Clark Street, Chicago.

Feb 6. CHARLES MINOT, Gen'l Sup't

W. MORRILL. G. B. BOWERS

MORRILL & BOWERS,

(Successors to and members of the late firm of
O. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders or

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men the West that all work furnished by us shall be of the best quality in style, workmanship and material. Orders respectfully solicited, with the assurance that we will spare no effort to give entire satisfaction.

1862. 1862. Pennsylvania Central R.R. 285 MILES DOUBLE TRACK.



(With its Connections)

IS A FIRST CLASS ROUTE,
FOR SAFETY, COMFORT AND SPEED,
TO ALL THE EASTERN CITIES!
THE TRACK IS STONE BALLASTED
AND ENTIRELY FREE FROM DUST!

THREE DAILY TRAINS FROM

PITTSBURGH to PHILADELPHIA

(with close connections from Western Cities.)

ALL CONNECTING DIRECT TO NEW YORK,

THROUGH PHILADELPHIA,

**AND CLOSE CONNECTIONS AT HARRISBURG FOR
BALTIMORE and WASHINGTON.**

FROM PITTSBURGH TO NEW YORK

ONE TRAIN RUNS DAILY (430 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

Arriving in advance of all other Routes.

EIGHT DAILY TRAINS FROM

PHILADELPHIA TO NEW YORK.

TICKETS FOR SALE TO BOSTON BY BOAT OR RAIL.

BOAT TICKETS GOOD ON ANY OF THE SOUND LINES.

FARE TO ALL POINTS AS LOW AS ANY ROUTE

SLEEPING CARS.

ON NIGHT TRAINS TO

Philadelphia, New York and Baltimore.

BAGGAGE CHECKED THROUGH AND TRANSFERRED FREE.

FREIGHTS.

By this Route Freight of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, to and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburg with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

Merchants and Shippers entrusting the transportation of their Freight to this Company can rely with confidence on its speedy transit.

THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "PA. PENNSYLVANIA CENTRAL RAILROAD."

For Freight Contracts or Shipping Directions, apply to or address either of the following Agents of the Company:

H. W. BROWN & CO., Cincinnati, Ohio.

D. A. STEWART, Freight Agent, Pittsburgh.

CLARKE & CO., Transfer Agents, Pittsburgh.

R. C. MELDRUM & CO., Madison, Indiana.

J. E. MOORE, Louisville, Ky.

W. W. AIKMAN & CO., Evansville, Ind.

R. F. SASS, St. Louis, Missouri.

CLARKE & CO., Chicago, Illinois.

W. H. & E. L. LANGLEY, Gallipolis, Ohio.

G. B. NEAL, Parkersburg, Virginia.

HALL & CO., Marietta, Ohio.

H. S. PIERCE & CO., Zanesville, Ohio.

McDOWELL & McCORM, Portsmouth, Ohio.

R. McNEELY, Maysville, Ky.

J. P. JOHNSTON, Ripley, Ohio.

JOHN TODD, Covington, Ky.

G. L. HEATON, Cleveland, Ohio.

R. C. MELDRUM, General Traveling Agent for the South and West.

LIVE STOCK.

Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—(via Allentown)—and with fewer changes than any other.

ENOCH LEWIS, Gen'l Superintendent, Altoona, Pa.

L. L. HOUSTON, Gen'l Ticket Agent, Philadelphia.

H. H. HOUSTON, Gen'l Freight Agent, Philadelphia.

General Railroad Arrangement.

UNION TICKET OFFICES.

LITTLE MIAMI AND COLUMBUS

AND

XENIA RAILROAD.



TRAINS RUN AS FOLLOWS
SUNDAYS EXCEPTED

	DEPART.	ARRIVE
Cincinnati Express.....	7:00 A. M.	9:30 P. M.
Mail and Express.....	8:30 A. M.	6:20 P. M.
Columbus Accommodation.....	4:00 P. M.	11:05 A. M.
Morrow Accommodation.....	6:00 P. M.	8:05 A. M.

Cincinnati Hamilton and Dayton RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE
Dayton and Sandusky Mail.....	7:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	7:00 A. M.	11:40 P. M.
Cin. & Chicago Air-Line Ex.....	8:00 A. M.	8:50 P. M.
Dayton and Richmond.....	3:15 P. M.	1:30 P. M.
Day., Toledo & Detroit Huntsville.....	5:20 P. M.	10:55 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	8:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:50
Eastern Night Express.....	10:00 P. M.	7:10 A. M.

The Eastern Night Express leaves SUNDAY Night in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE
Lafayette and Chicago Mail.....	5:00 A. M.	12:20 P. M.
Indianapolis and Terre Haute.....	5:00 A. M.	12:20 P. M.
Decatur, Springfield & Quincy.....	12:45 A. M.	4:45 P. M.
Chicago Night Express.....	5:00 P. M.	10:40 A. M.

Ohio and Mississippi Railroad. CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY
For Louisville, Vincennes, Evansville, Cairo, St. Louis and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE
Louisville and St. Louis Mail.....	6:15 A. M.	10:00 P. M.
Louisville and St. Louis Night Ex.....	7:10 P. M.	7:20 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES slower than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front;

North-west corner Third and Vine (Burnet House); and at the respective Depots

SLEEPING CARS ON ALL NIGHT TRAINS.

Omnibuses call for passengers as usual.

P. W. STRADER.

General Ticket Agent L. M. & C. & X., and C. H. & D Railroads.

W. H. L. NOBLE.

General Ticket Agent Indianapolis & Cincinnati Railroad.

E. F. FULLER.

General Ticket Agent Ohio & Mississippi R. R.

A. BRIDGES & CO.

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS

—AND—

MACHINERY,
OF EVERY DESCRIPTION.

No. 64 COURTLANDT STREET
NEW YORK.

ALBERT BRIDGES.

JOE

Prosser's Patent LAP-WELDED IRON BOILER TUBES.

Every article necessary to drill the TUBE-PLATES and to set the TUBES.

Steel Wire and Whalebone Tube BRUSHES.
Artesian Oil and Salt WELL-TUBING.
Lap-Welded Steel BOILER TUBES
Glass Enameled Iron WATER PIPE;
Wrought Iron STEAM PIPE.

THOS. PROSSER & SON,
28 Platt Street, N. Y.

N. W. BALDWIN, MATHEW BAIRD,
M. W. BALDWIN & CO.
ENGINEER'S
BROAD AND HAMILTON ST.
Philadelphia, Pa.

Would call the attention of Railroad Managers, and those interested in Railroad Property, to their system of

LOCOMOTIVE ENGINES,

In which they are adapted to the particular business for which they may be required, by the use of one, two, three or four pair of driving wheels; and the use of the whole, or so much of the weight as may be desirable for adhesion; and in accommodating them to the grades, curves, strength of superstructure, and rail and work to be done. By these means the maximum useful effect of the power is secured with the least expense for attendance, cost of fuel, and repairs to Road and Engine.

With these objects in view, and as the result of twenty-six years' practical experience in the business by our senior partner, we manufacture five different kinds of Engines, and several classes or sizes of each kind. Particular attention paid to the strength of the machine in the plan and workmanship of all the details. Our long experience and opportunities of obtaining information enables us to offer these engines with the assurance that in efficiency, economy and durability, they will compare favorably with those of any other kind in use. We also furnish to order Wheels, Axles, Bowling or Low Moor Tire (to fit centers without boring), Composition Castings for Bearings; every description of Copper, Sheet Iron and Boiler Work; and every article pertaining to the repair or renewal of Locomotive Engines.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port United States, will be made by the undersigned
THEODORE DEHON,
no 1 10 Wal Broadway, New York

EDWIN J. HORNER,
SUCCESSOR TO

McDANIEL & HORNER,

**LOCOMOTIVE & RAILROAD
CAR SPRING
MANUFACTURER,
WILMINGTON, DELAWARE.**

WHEELER & WILSON'S



SEWING MACHINES.

WM. SUMNER & CO.,

Pike's Opera House, 4th St. Cincinnati, Ohio.

BRANCH OFFICES:

Louisville, Ky., Columbus, O.,
Lafayette, Ind., Dayton, O.,
Indianapolis, Ind., Zanesville, O.

We offer the Wheeler & Wilson Sewing Machine, with important improvements, at a reduction on former prices; and to meet the demand for a good, LOW-PRICED FAMILY MACHINE, have introduced a new style, working upon the same principle, and making the same stitch, though not so highly finished, at—

Fifty-Five Dollars.

The elegance, speed, noiselessness and simplicity of the Machine, the beauty and strength of stitch, being ALIKE ON BOTH SIDES, impossible to unravel, and leaving no chain or ridge on the underside, the economy of thread, and adaptability to the thickest or thinnest fabrics, have rendered this the most successful and popular Family Sewing Machine now made.

At our various offices we sell at New York prices, and give instructions, free of charge, to enable purchasers to sew ordinary seams, hem, fell, quilt, gather, bind, and tuck, all on the same machine, and warrant it for three years.

Send or call for a circular, containing all particulars, prices, testimonials, etc.

WM. SUMNER & CO.

MOSELEY'S WROUGHT IRON ARCH BRIDGES

—AND—

Corrugated Iron Roofs ARCHED AND FLAT.



CORRUGATED SHEETS, OF ALL SIZES, constantly on hand, painted, and ready for shipment, with instructions for applying them. Give us your orders at No. 66 West Third Street, Cincinnati, Ohio.
Snt. 2. MOSELEY & CO.

JAMES FOSTER, Jr. & Co.,
MATHEMATICAL AND PHILOSOPHICAL INSTRUMENT MAKERS,

S.W. CORNER FIFTH AND RACE,

Cincinnati, Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

H. TWITCHELL, JAMES FOSTER, JR.

Street and Other Railroad Iron.

WOOD, MORRELL & CO., Johnstown, Cambria Co., Pennsylvania, are prepared to execute orders for Street and other Rails on terms favorable to parties wanting to purchase.
Ag. 4 m. 6.

FREEDOM IRON COMPANY.

MANUFACTURERS OF

LOCOMOTIVE TYRE,
Engine and Car Axles, Pump and Piston Rods
Bar of all Sizes,
And all Forgings for Railroad Machinery.

Lewistown, Mifflin Co., Penn.

JOHN A. WRIGHT, Sup't

This Iron is all made from best Juniata cold-blast charcoal Pig Iron, refined with Charcoal in the old-fashioned Forge Fire, hammered into a Bloom from which Iron hammered. The whole operation from ore to finished iron is conducted at our own Works
June 9.

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

Continue to receive orders and to furnish with promptness the best and latest improved

COAL OR WOOD BURNING LOCOMOTIVE ENGINES

AND OTHER

Railroad Machinery, Tires, etc.

—AND ALSO TO—

Rebuild and Repair Locomotives.

The above works being located on the New York Central Railroad, near the center of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, President.
WALTER McQUEEN, Sup't.

PASCAL IRON WORKS,

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

MANUFACTURERS OF

Lap-Welded American Charcoal Iron Boiler Flues—from 1¼ to 10 inches outside diameter, cut to definite lengths.

Wrought Iron Welded Tubes—from ½ inch to 8 inches inside diameter, with screw and socket connections, for Steam, Gas Water, or other purposes, and fittings of every kind to suit the same.

Wrought Iron Galvanized Tubes—strong and durable, designed especially for Water purposes.

Cast Iron Gas or Water Pipe—¼ to 24 inch diameter, and branches for same, &c.,

Gas Works Castings, etc., etc.

PHILADELPHIA,

STEPHEN MORRIS, CHAS. WHEELER,
THOS. T. TASKER, JR., S. P. M. TASKER,
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BUTLER'S

MERCANTILE, RECORD AND COPYING

EXCELSIOR FLUID INKS!

MANUFACTURED BY

JAMES J. BUTLER, AGENT

39 Vine St., corner of Commerce.

CINCINNATI, O.

In use by 10,000 Merchants, Bankers and Railroads for the South and West. For sale by 1,000 leading Merchants and Merchants of the South and West.

The Railroad Record.

E. D. MANSFIELD
T. WRIGHTSON, . . . } Editors

CINCINNATI:

THURSDAY, FEBRUARY 19, 1863.

THE RAILROAD RECORD,

PUBLISHED EVERY THURSDAY MORNING,

BY WRIGHTSON & CO.

OFFICE—No. 167 Walnut Street.

SUBSCRIPTIONS—\$3 Per Annum, in Advance.

ADVERTISEMENTS.

A square is the space occupied by ten lines of Nonpareil.

One square, single insertion.....	\$1 00
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
“ column, single insertion.....	5 00
“ “ per month.....	10 00
“ “ six months.....	40 00
“ “ per annum.....	80 00
“ page, single insertion.....	15 00
“ “ per month.....	25 00
“ “ six months.....	110 00
“ “ per annum.....	200 00

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THE LAW OF NEWSPAPERS

If subscribers order the discontinuance of their newspapers, the publisher may continue to send them until all arrearages are paid.

If subscribers neglect or refuse to take their newspapers from the office to which they are directed, they are held responsible until they have settled the bills and ordered them discontinued.

If subscribers move to other places without informing the publisher, and the newspapers are sent to the former direction, they are held responsible.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors.

Arrival and Departure of Trains.

Little Miami—		
Cincinnati Express.....	7.00 A. M.	9.20 P. M.
Mail and Express.....	8.30 A. M.	6.20 P. M.
Columbus Accommodation.....	4.00 P. M.	11.05 A. M.
Morrow Accommodation.....	6.00 P. M.	8.05 A. M.
Cincinnati, Hamilton & Dayton—		
Cin. & Chicago Air Line.....	8.00 A. M.	8.50 P. M.
Dayton & Sandusky.....	7.00 A. M.	6.45 P. M.
Dayton & Toledo.....	7.00 A. M.	11.40 P. M.
Dayton Accommodation.....	3.15 P. M.	1.30 P. M.
Dayton, Lima, Toledo & Huntsville.....	5.20 P. M.	10.55 A. M.
Cin. & Chicago Air Line Exp.....	7.00 P. M.	8.10 A. M.
Hamilton Accommodation.....	7.00 P. M.	6.50 A. M.
Eastern Night Express.....	10.00 P. M.	7.10 A. M.
Sandusky, Dayton & Cincinnati—		
Morning Express.....	7.00 A. M.	6.45 P. M.
Bellefontaine Accommodation.....	5.20 P. M.	10.55 A. M.
Marietta & Cincinnati—		
Mail.....	7.45 A. M.	5.25 P. M.
Accommodation.....	3.30 P. M.	9.55 A. M.
Ohio & Mississippi—		
Mail.....	6.15 A. M.	10.00 P. M.
Express.....	7.10 P. M.	7.20 A. M.
Indianapolis & Cincinnati—		
Mail.....	5.00 A. M.	12.20 A. M.
Chicago Express.....	5.00 P. M.	10.40 A. M.
Dayton & Michigan—		
Toledo, Detroit & Chicago Exp.....	7.00 A. M.	11.40 P. M.
Toledo & Chicago Express.....	5.20 P. M.	10.55 A. M.
Cincinnati & Chicago Air Line—		
Mail and Express.....	8.00 A. M.	8.50 P. M.
Night Express.....	7.00 P. M.	8.10 A. M.
Cincinnati, Wilmington and Zanesville—		
Morning Express.....	8.30 A. M.	6.45 P. M.
Accommodation.....	6.00 P. M.	8.20 A. M.
Kentucky Central— (City time.)		
First Train.....	6.45 A. M.	10.37 A. M.
Second Train.....	2.10 P. M.	6.30 P. M.

HUDSON RIVER R. R.

The following from the Albany *Evening Journal* is travelling the rounds:

The question of a Hudson River Railroad dividend has been speculated upon, variously, for many years. Different, but always remote, periods were indicated. Some settled upon the advent of a bridge at Albany; others inclined to the opinion that it would come along with "Miss Flite's" judgment in the English Court of Chancery; while others postponed it till the occasion of that meteorological phenomenon when it is supposed "Larks" may be caught. Stockholders in laying their scrip aside with "Northern Railroad," "Parker Vein," &c., consoled themselves with the reflection that it might be worth something for their grandchildren. None, however, hit either upon the precise period, or the true financial reason for their dividend, viz: Rebellion! And yet out of that "venomous toad's head" comes, to stockholders of the Hudson River Railroad, this "precious jewel."

The realization of a dividend, upon this road, is our second surprise. We were originally among those who could not believe it would ever be built—who thought it irreverent to attempt to rival God's munificent, glorious highway, the Hudson River. If our files were searched we should be found expressing the opinion that the idea of a "Railway to the Moon" was scarcely more preposterous than the projected one along the banks of the Hudson river. The opinion was borrowed, we suppose, from one we heard so frequently expressed, twenty five years earlier, that none who witnessed the commencement of the Erie Canal would live to see it completed.

But after all, and seriously, the stockholders of the Hudson River Railroad are indebted for their dividend to its excellent management. Years of indomitable industry, rigid economy, and strict integrity tell the story. Nothing less or short of these qualities would have answered. The road has been deeply in debt, and sometimes almost, hopelessly embarrassed. The question frequently was not whether it would ever pay a dividend, but whether it would be surrendered to the bondholders. But on these occasions it was saved by not borrowing money at ruinously usurious rates. And it has been finally rescued, and its affairs placed upon a paying basis, more by its savings than by its earnings.

To the enlightened, energetic, untiring devotion of their President, Samuel Sloan, the stockholders of this road are indebted for this dividend, and for the present palmy financial condition of their road. He has been ably seconded, in earning the money, by the efficient General Superintendent, Mr. Smith, and the thorough wide-awake agent, Mr. Briggs; and in saving it, by a model Treasurer, Mr. Clark. Indeed, Mr. Sloan's rarest merit, as president of a railroad, consists in finding the "right men for the right places."

The writer must have held some stock in the Hudson River Railroad, and been actually frightened from his consistency by the unexpected dividend. He first tells us that out of that "venomous toad's head" the rebellion comes this precious jewel of a dividend to the stockholders of the Hudson River Railroad. And then he gravely asserts, "but after all, and seriously, the stockholders of the Hudson River Railroad are indebted, for their dividend, to its excellent management." And

then he goes into an ecstasy of laudation over its enlightened president, efficient superintendent, its wide-awake agent, and its model treasurer.

Which of the two reasons was it? He tells us "after all and seriously" it was the latter. Now we cannot see it. The management that would operate a railroad at a dead loss for a series of years, constantly adding to its debts, and running up the dangerous item of floating debt to nearly a million dollars, and would then squander the first surplus it has ever earned, cannot be called "intelligent," "efficient," "wide awake" or "model." Such management does not look to the permanent interests of the stockholders of the road. It is a short sighted and narrow policy that plucks the fruit before it is ripe, and thus destroys the full fruition which it might otherwise have enjoyed.

As to the "efficiency" of the management of this road, we think it will be difficult to convince the travelling public that a management which permits wholesale depredations upon checked baggage for a whole year before discovery, is "efficient" or "wide awake." The managers of the Hudson River Railroad must change their course, and seriously mend their ways before the public will accord them the credit that the joy struck editor so fullsomely bestows.

A LESSON ON BRIDGES.

We have hitherto so frequently called the attention of railroad managers to the unfitness of wooden structures for railroad bridges, that we hesitated again to perform our duty, and enter our protest against these human traps. An accident recently occurred on the Ohio and Mississippi R. R. which fully demonstrated our proposition. A construction train, consisting of a locomotive and two cars, was stopped on a bridge for some cause, and while standing there quietly, the whole structure gave way, precipitating the locomotive into the river, and killing a mason who was at work below. A human life was lost, and a large amount of property destroyed. Had this been a passenger train instead of a construction train, there is no telling what extent of damage might have been caused. Now in all this the railroad company were perhaps but little to blame. The bridge was not over six years old, and the company had taken every precaution in the outset to procure good material. The timber of which it was made was brought from New York for the purpose of having the very best that could be obtained. And yet this is the second bridge within a year that has thus unaccountably failed on this line alone. The fault, if any can be found, lies in the material. Wooden structures are not fit for railroad purposes, and should be abandoned for those of iron or stone. A material as perishable as wood is

not fit to be exposed to the hard usage it is sure to receive on a travelled railroad. The heavy surging of locomotives, the rapid tramp of passenger trains, or the solid rolling of freight trains: all these are like the frequent striking of enormous sledge hammers, battering and bruising its weak points, till at last the material gives out, and then we hear of a frightful railroad accident which appalls the community. A bridge has given way—so many lives have been lost—so many human beings maimed—so much property destroyed, and travel interrupted for so long a time. In the present instance the material was wholly gone—decayed and rotten. The wonder is that it could hold its own weight.

Had this been a substantial iron bridge of any of the modern patterns, instead of being worn out at the end of six years use, it would have only just begun its usefulness, and years of service and of safety would have yet been in store for it. We trust the company will replace its wooden traps with solid and substantial iron structures that will stand the rack of time, and bear the test of hard usage.

INDIANAPOLIS, PITTSBURGH AND CLEVELAND R. R.

The earnings of this road for the fiscal year ending Dec. 31, 1861, were:

Earnings from passengers.....	\$114,158 57
" freights.....	197,535 20
" mail.....	12,750 00
" express.....	7,369 18
	\$331,812 95
Expenses viz:	
Repairs of engine.....	\$15,266 85
" cars.....	15,846 59
" road.....	36,008 06
" structures, etc.....	7,054 15
Train expenses.....	30,854 80
Depots and stations.....	11,658 51
Wood.....	21,615 92
Salaries and office expenses.....	6,612 43
Loss and damage.....	2,397 14
Oil and waste.....	1,965 11
All other expense.....	16,594 77
	163,874 33

Net earnings.....	\$163,938 62
Interest on bonds.....	\$94,762 50
Taxes.....	8,669 15
Interest and cost of floating debt.....	3,432 66
Expenses of extending first mortgage bonds.....	5,372 50
	112,236 81
Surplus.....	\$53,701 81
Compared with the previous year the earnings show an increase of.....	53 \$69 88
With an increase expenses of.....	7,667 45
Making the increase in net earnings.....	\$46,133 43

The excess of through over local travel and freights has been \$92,085 27. The working expenses are a fraction under 50 per cent of the gross income, against 58 per cent in 1860.

No important changes have been made in the stock and bond account. The extension of the 1st mortgage bonds is nearly completed, and only three of the income bonds remain unconverted into 2d mortgages. The floating debt of the company is entirely liquidated, except the overdue domestic bonds, amounting to \$32,400.

The track is in good condition. The repairs of the year have been fully up to the

depreciation. The bridges are in good order. A large amount of work has been done in replacing wooden with stone abutments and culverts. The side tracks, which were originally laid with flat bar iron, require renewal. The buildings also require renewals. The engine house and shops at Indianapolis will have to be rebuilt, and several station houses repaired.

The company have purchased about twenty-five acres of land on the east side of the city of Indianapolis, and contemplate removing thither the shops and freight yards during the present and ensuing years. These improvements will involve an expense of forty or fifty thousand dollars.

The following is the general balance sheet for the year ending Dec. 31, 1861:

ASSETS.	
Cost of road and equipment.....	\$1,838,478 29
Lands and lots.....	47,186 45
Bills receivable.....	26,285 96
Stock of C. P. & I. R. R. Co.....	10,000 00
Sinking fund.....	84,400 00
Due from other roads.....	8,255 53
" individuals.....	1,170 32
Materials on hand.....	11,634 41
Sinking fund, notes, etc., in hands of agents.....	4,330 91
Executive committee.....	50,381 56
New grounds, etc., at Indianapolis.....	1,652 14
	\$2,062,545 57

LIABILITIES.	
Capital stock.....	\$835,971 26
1st mortgage bonds.....	649,600 00
2d ".....	314,000 00
Domestic ".....	32,400 00
Income ".....	27,000 00
Bills payable.....	11,065 87
Surplus earnings.....	19,039 41
Interest and discount on bonds.....	17,205 50
Unpaid taxes.....	3,394 15
" dividends.....	757 44
Due other roads.....	403 85
Trustee of sinking fund.....	336 66
Individual accounts.....	1,973 77
Cash.....	57 56
	\$2,062,545 57

The office of the company is at Indianapolis, Ind. The officers and directors are:

President—Thomas A. Morris.

Directors—John Brough, Simon Yandes, T. A. Morris, J. M. Townsend, E. J. Peck, E. King, M. G. Walker, A. Makepeace, D. Kilgore, S. P. Anthony, D. Heaston, S. Witt, Henry Wick, A. B. Stone, James H. Godman.

Secretary and Treasurer—Edward King.

THE BRANDYWINE, R. R.—The Wilmington *Republican*, of January 24, says: "At the city Councils last thursday evening a bill was submitted to be laid before the Legislature, asking that body to empower the Council to subscribe \$150,000, and issue the bonds of the city therefor, bearing interest at a rate not exceeding six per cent per annum, and to receive in exchange for the same bonds of said railroad company, secured by the first mortgage on its property and franchises; provided that a bona fide subscription shall have been first made from other sources sufficient, when taken in connection therewith, to complete one continuous track of said railroad from this city to the Baltimore Central Railroad, and provided the bonds shall not be issued until the road has been finished and put in running

order from this city to the said Central road. It is further provided that the said subscription shall not be binding until approved by a majority of the legal voters of the city. A resolution approving of its passage by the Legislature was adopted by a vote of twelve to three."

CHICAGO AND ALTON R. R.

The Chicago and Alton (late Chicago and Mississippi) Railroad Company, has been re-organized under a special charter enacted by the legislature of Illinois. Mr. James Robb (late receiver of the old corporation), has been elected president, and Joseph Price Secretary and Treasurer.

The bonds and shares of this company, when the issue is full, and which, we understand, is now near completion, will be as follows:

First—First Mortgage Preferred Sinking Fund Bonds, bearing 7 per cent interest, redeemable within fifteen years by an annual sinking fund of \$70,000, interest payable 1st of April and 1st of Oct.	\$600,000
Second—First Mortgage Bonds at thirty years, bearing 7 per cent interest, payable 1st July and 1st Jan.	2,400,000
Total.....	\$3,000,000

The foregoing issues of bonds are secured by a trust deed to Samuel J. Tilden and Lewis H. Meyer, Trustees, on 220 miles of road and the entire rolling stock and property of the Co., being an average of \$13,636 per mile.

Third—Income bonds at 20 years, bearing 7 per cent interest, payable 1st of May and 1st of Nov.

Total mortgage and income debt.....	\$4,100,000
—averaging \$16,636 per mile.	
Fourth—Preferred stock when the issue is complete, estimated.....	2,350,000
This stock is entitled to a preferred annual dividend of 7 per cent out of the net profits of the company, but is not accumulative if the profits are not earned.	
Fifth—Common stock when the issue is complete, estimate.....	1,750,000
Total debt capital.....	\$8,200,000

The common stock is only entitled to dividend out of the excess of profits of the company remaining after payment of dividend on preferred stock, but in case the profits of the company should exceed 7 per cent on the preferred and common stock, then they are to share equally in their division.

The receipts of the road, under the management of the late receiver were \$938,000 in 1860; \$1,098,000 in 1861, and will exceed \$1,230,000 in 1862. These receipts are less in amount than was practicable to have been earned, if the rolling stock of the road in previous years had been equal to the demands of business, and the wants of the country on its line. This want will be soon overcome, as extensive improvements are being made in this department, and we are officially informed that provision to the extent of nearly \$400,000 exists under the present organization to cover the cost of these improvements, and the renewals of the road, independent of any appropriation out of its receipts, being sufficient to advance its general condition to that of a first class American road.

The title of the new company to the railroad was acquired by purchase under foreclos-

SECTION 1. Be it enacted by the Senate and House of Representatives, of the Commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by the authority of the same: That David Thomas, R. H. Wright and C. Pretz, of Lehigh county; Asa Packer, of Carbon county; R. H. Sayre, of Northampton county; J. Dutton Steele, of Montgomery county; H. S. Evans, of Chester county, and J. Edgar Thompson, Charles E. Smith, Thomas A. Scott, Isaac S. Waterman, Samuel J. Reeves, Charles S. Wood, Josiah Bacon, H. Pratt McKean, Joseph C. Grubb, Geo. L. Buzby, William W. Longstreth, John Hulme, Edward C. Dale, E. C. Biddle, Lewis T. Watson and Thomas S. Fernon, of the city of Philadelphia, or any three of them, are hereby appointed commissioners to open books, receive subscriptions, and organize a company by the name and title of The Valley Forge Railroad Company, with authority and power to construct a railroad from or to a point on the Lehigh Valley Railroad at or near Allentown or Hokendauqua in Lehigh county, and a point on the south line of the State in or near the valley of Brandywine creek, by the most eligible, expedient and advantageous route, with the right to continue

or extend said road to tidewater in the State of Delaware, with the consent of that State.

SECTION 2 That said company are hereby authorized and empowered to connect their railroad with any other railroad which it may cross or intersect, and also enter into contract or agreement for right of way for their rolling stock over any other road occupying a route parallel or nearly parallel with the course of the road authorized by this, act and forming in any way a portion of a continuous line between the Lehigh river in Lehigh county and the Delaware river or bay in the State of Delaware; and the said Valley Railroad Company shall have as full authority and control over any part or parts of road built by said company between any two or more existing roads, intersected by their line when located, including power to lease either or all the links or divisions so built, as if said company had constructed the whole of the road authorized by this act; and said company shall also have authority to construct a branch road from their main road in Montgomery county to Norristown in said county.

SECTION 3. That any railroad company with whose road the Valley Forge Railroad Company may connect their road, or stipulate to connect their road, at either end of the same or at any intermediate point on the line thereof, are hereby authorized and empowered to subscribe to the capital stock of The Valley Forge Railroad Company, and to provide for the payment of such subscription by the exchange of assets for certificates of shares subscribed for, or by issuing certificates of stock or bonds in the manner usual in such cases. And the provisions of this section are hereby extended to include the Philadelphia, Germantown and Norristown Railroad Company.

SECTION 4. That the capital stock of The Valley Forge Railroad Company shall consist of ten thousand shares; provided that said company may, from time to time, by a vote of the stockholders at a meeting called for the purpose, increase the capital stock to any amount which may be deemed sufficient to build the whole of the road authorized by this act.

SECTION 5. That for the purpose of completing and equipping their railroad, and for providing such piers, wharves and other appurtenances as may be necessary and convenient for the storage and shipment of coal and iron and other articles transported over their road, The Valley Forge Railroad Company are hereby authorized and empowered to borrow money, and issue bonds (in sums of not less than \$500) at a rate of interest not exceeding seven per centum per annum, and to secure the payment of said bonds by executing and delivering to such trustees as the Board of Directors may select, a mortgage or mortgages of all or any part of their estate, real and personal, also their corporate rights and franchises. And any railroad company having authority to subscribe for capital shares of The Valley Forge Railroad Company, under the provisions of the third section of this act, are hereby authorized and empowered to endorse and guarantee the bonds of said company, in such manner and amounts as may be deemed expedient to facilitate the construction of The Valley Forge Railroad, and provide additional accommodation for forwarding to market minerals mined in this State.

SECTION 6. That said company shall have authority to contract for and purchase, hold and use, steam colliers or other craft adapted to the coastwise coal trade, and to employ the same in the transportation of min-

erals and other articles, between the terminus of their road and any seaport market.

SECTION 7. That a President and six directors shall conduct and manage the affairs and business of the Valley Forge Railroad Company, subject to all the provisions and restrictions of an act regulating railroad companies, approved the 19th day of February, 1849, and the supplements thereto, except where inconsistent with this act.

WEST CHESTER & PHILADELPHIA R. R.

Extract of annual report of Henry Wood, Esq., Superintendent for the year ending Dec. 31, 1862:

The following is a comparative statement of the earnings and expenses for the years 1861 and 1862:

	Earnings.	Expenses.	Net Earnings.
1861.....	\$129,447 16	\$61,367 16	\$68,080 00
1862.....	140,202 61	61,656 40	78,546 21

Increase.. \$ 10,755 45 Inc. \$189 24 Inc.. \$10,556 21

Expenses for 1862 were 43.9 per cent of the earnings.

The number of passengers carried during the year, was:

	No. Passeng's	Am't Rec'd.
Through passengers.....	32,296	\$19,219 65
Way passengers to Philad'a.....		
Local travel.....	99,374	32,521 31
Coupon travel.....	19,239	6,276 15
Passengers between Philadelphia & Philadelphia & Baltimore Central R. R.....	35,106	13,340 28
Passengers between West Chester and Philad'a and Baltimore Central R. R.....	7,112	1,280 16
Excursion passengers from Philadelphia. Full and half passengers.....	8,792	932 75
Commutation passengers.....	23,875	2,224 50
Local travel.....	39,383	10,072 18
Total.....	264,107	\$55,866 98
Number of regular passenger trains run during the year.....		3,232
Average number of passengers per train.....		79

The freight tonnage was as follows:

	Tons.	lbs.
Freight, through.....	2,785	24
" way.....	10,677	1,900
Coal, way.....	16,977	1,936
" through.....	2,938	314
" to Philadelphia & Baltimore Central R. R.....	5,429	1,632
Freight between Philadelphia and Baltimore Central Railroad and Philadelphia.....	21,505	898
Freight between Philadelphia and Baltimore Central Railroad and way stations.....	877	745
Total tonnage.....	61,191	1,049

Number of freight cars hauled (four wheel):

	Loaded.	Empty.	Total.
West.....	10,016	2,085	12,101
East.....	5,725	6,325	12,050
Average distance hauled by trains.....			16 miles.
Average number of freight cars (four wheels) per train.....			24 "

The amount received from passengers and freight to and from the Phila. & Balt. Central R. R. was:

	1862.	1861
Passenger fare.....	\$14,620 44	\$12,954 38
Freight.....	10,416 60	11,104 93
	\$25,037 40	\$24,059 31
Increase.....	977 73	

The decrease in the amount received from that road for freight is caused by the reduction in the price charged for its transportation from the rates charged for the first half of the year 1861.

RAILROAD LAW IN IOWA.

The following is the section of the act passed at the late session of the Legislature of Iowa which refer to railroads in that State.

The act is entitled: An act to amend chapter forty-five of the review of 1860, being an act in relation to revenue:

Sec. 16. Each railroad company in this State shall annually, on or before the first day of February, furnish to the State Treasurer a sworn statement of the gross receipts of their railroad, without reduction of the expenses, for the year ending on the first day of January preceding, which said statement shall be sworn to by the Secretary and Treasurer of such company. And the Treasurer of State shall levy on said gross receipts a tax of one per centum, which the said railroad companies shall pay on or before the 15th day of February, after which time the said taxes shall become delinquent and the same penalties and interest shall attach as on other taxes. After the said taxes become delinquent, the Treasurer of the State shall proceed to collect the same, in the same manner and with the same rights and powers as a Sheriff may on execution; one-half of said taxes levied and collected as aforesaid shall be equally apportioned by the State Treasurer to the several counties through which the said roads respectively run, in proportion to the number of miles of main track of road in each county, and shall be paid over by him to the county Treasurer of such counties.

If any railroad company shall fail to make the sworn statement required by this act, the Treasurer of State shall ascertain as near as may be the gross earnings of such delinquent company, and assess thereupon the said one per centum, and shall seize and levy upon the whole or any part of the property, rights and franchises of said company, and after giving ten days, public notice of the time and place of sale, shall proceed to sell the same at public auction, to satisfy the amount of said assessment, together with all costs and expenses incurred in making the assessment and sale. The tax herein provided for shall be in lieu of all taxes for any and all purposes on the roadbed, track, rolling stock and necessary buildings for operating their road. But other property belonging to such company, whether personal or real, shall be taxed as property of individuals in the respective counties in which the same may lie.

THE NEW LAW OF "ABANDONMENT."—We desire to remind our inventive friends who may happen to have incomplete applications of long standing still pending at the Patent Office, that the new law, which brings such cases into the class of "abandoned inventions," will begin to take practical effect on the 2d of March, 1863. The law was passed March 2d, 1861, and section 12 reads as follows:

And be it further enacted, That all applications for patents shall be completed and prepared for examination within two years after the filing of the petition, and in default thereof they shall be regarded as abandoned by the parties thereto, unless it be shown to the satisfaction of the Commissioner of Patents that such delay was unavoidable, and all applications now pending shall be treated as if filed after the passage of this act."

In matters which relate to obtaining patents delays are often dangerous. Let all who have pending applications complete them at once, and thus relieve themselves of all liability to loss.—Sci. Am.

CAST STEEL WORKS. OF FRIED. KRUPP,

At ESSEN in Rhenish Prussia.

Patent Railway Tires, without a weld. Axles, Cannon, Anchor Flukes,
Propeller Blades and Shafts. Cranked Axles and Shafts,
Up to Twenty Tons weight.

CAST STEEL IN BARS, BEST QUALITY,

Suitable for Axles, Shafts, Rolls, Tools, Dies, Needle and Music Wire, Fine Cutlery, &c,

KRUPP'S TIRES

*Are cheaper at their cost than Iron ones gratis.
They will, without turning, entirely outwear the best Iron ones.
Wear uniformly, without flat places, or lamination.
Are not affected by extreme cold.
More than Forty Thousand of these Tires have been supplied.*

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Possess similar advantages over iron ones that the Tires do.

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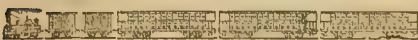
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TRAINS LEAVE PHILADELPHIA for the SOUTH DAILY,

At 3.30, A. M., Express; 8.15, A. M., Mail; 11.35, A.
M., Express, and 11, P. M., Express.

On Sundays at 3.30, A. M., and 11, P. M.
Leave Baltimore for the North and West daily, at 8.30;
A. M., Express; 1.04, P. M., Express; 5.20, P. M., Mail,
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On Sundays at 7, P. M., only.
If Through connections made for all points at the
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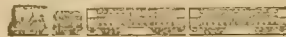
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CHANGE OF TIME.

THE PASSENGER TRAINS leave Cincinnati Daily
from the foot of Mill, on Front-street. Through to Indi-
anapolis, Terre Haute, Lafayette and Chicago in advance
of all other roads.

FIRST TRAIN—5:00 A. M.—Chicago Mail for Indian-
apolis, Lafayette and Chicago, connecting at Chicago with
all Western and North-western trains. Terre Haute train
leaves Indianapolis at 1:30 P. M.

SECOND TRAIN—12:45 A. M.—Indianapolis, Lafayette,
Springfield, Quincy, Palmyra and St. Joseph Express ar-
rives at Indianapolis, Lafayette, Springfield, Quincy,
Palmyra, St. Joseph, Atchison, K. T. at 1:30 A. M.
Terre Haute and Alton train leaves Indianapolis at 8:20
P. M.

THIRD TRAIN—5:00 P. M. Chicago Express for In-
dianapolis, Lafayette, Chicago, connecting at Chicago with
all Western and North-western Trains.

Sleeping cars are attached to all the night trains or
line, and run through to Chicago without change of cars.
Be sure you are in the RIGHT TICKET OFFICE before
you purchase your Ticket, and ask for tickets via Lawrence-
burg and Indianapolis.

Take the same and time shorter than by any other route.
Baggage checked through.

Through tickets, good until used, can be obtained at the
Ticket Offices north-west corner Broadway and Front sts.;
No. 1 Burnet House corner, and at the Depot office, foot of
Mill, on Front street, where all necessary information may
be had.

Omnibuses run to and from each train, and will call for
passengers at all Hotels and all parts of the city by leaving
address a either office.

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J. T. CRAPSEY,
ATTORNEY AT LAW,

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Railroad Machine Works,
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MANUFACTURE

CHILLED WHEELS

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TYRES,

FOR RAILROAD CARS

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LOCOMOTIVE ENGINES.

Orders executed promptly to any extent for their

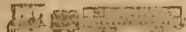
CELEBRATED WHEELS.

Either Single or Double Plate,
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To Hammered or Rolled A
In the best Manner, at the Shortest Notice,
Most Reasonable Terms.

Baltimore and Ohio Railroad RE-OPENED!



This great national thoroughfare is again open for
Freight and Travel.

The Cars and Machinery destroyed are being replaced by new running stock, with all recent improvements; and as the

Bridges & Track are again in Substantial Condition

The well-earned reputation of this Road for

SPEED, SECURITY AND COMFORT

Will be more than sustained under the reorganization of its business.

In addition to the Unequalled Attractions of Natural Scenery heretofore connected to this route, the recent Troubles upon the Border have associated numerous points on the road, between the Ohio river and Harper's Ferry, with painful and instructive interest.

CONNECTIONS

At the Ohio River with Cleveland and Pittsburg, Central Ohio, and Marietta and Cincinnati Railroads; and through them with the whole Railway System of the Northwest, Central West and Southwest. At Harper's Ferry with the Winchester road. At Washington Junction with the Washington Branch for Washington City and Lower Potomac. At Baltimore with four daily trains for Philadelphia and New York.

TWO DOLLARS additional on through tickets to Baltimore or the Northern Cities give the privilege of visiting WASHINGTON CITY en route—being \$3.00 lower than the cost by any other line, as recently charged; and the rate to Baltimore being \$1.50 lower than recently charged by way of Harrisburg.

This is the ONLY ROUTE by which passengers can procure through tickets and through checks to WASHINGTON CITY.

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Gt. Western United States Mails.

EXPRESS TRAINS leave Dunkirk and Buffalo, daily, on arrival of all Trains on the Lake Shore Railroad, from Cleveland, Cincinnati, Toledo, Chicago, Milwaukee, St. Paul, St. Louis, etc., and run through to New York without change.

THE ONLY ROUTE running Cars through from the Lakes to New York City. Splendid ventilated Sleeping Cars run on Night Trains.

Baggage checked through. Fare always as low as by any other route.

Boston Passengers and their Baggage transferred Free in New York.

Be particular and call for Tickets via the Erie Railway, which are sold at all the principal Railroad Offices in the West.

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Feb 6. CHARLES MINOT, Gen'l Supt

W. MORRILL.

G. B. BOWERS

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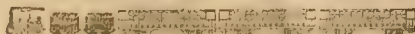
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(with close connections from Western Cities.)

ALL CONNECTING DIRECT TO NEW YORK.

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ONE TRAIN RUNS DAILY (430 MILES.)

VIA ALLENTOWN, WITHOUT CHANGE OF CARS.

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By this Route Freight of all descriptions can be forwarded to and from Philadelphia, New York, Boston, or Baltimore, and from any point on the Railroads of Ohio, Kentucky, Indiana, Illinois, Wisconsin, Iowa, or Missouri, by Railroad direct.

The Pennsylvania Central R.R. also connects at Pittsburg with Steamers, by which Goods can be forwarded to any port on the Ohio, Muskingum, Kentucky, Tennessee, Cumberland, Illinois, Mississippi, Wisconsin, Missouri, Kansas, Arkansas, and Red Rivers; and at Cleveland, Sandusky, and Chicago with Steamers to all Ports on the North-Western Lakes.

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THE RATES OF FREIGHT to and from any point in the West by the Pennsylvania Central Railroad, are at all times as favorable as are charged by other Railroad Companies.

Be particular to mark packages "VIA PENNSYLVANIA CENTRAL RAILROAD."

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Drover and Farmers will find this a most advantageous route for Live Stock. Capacious Yards well watered and supplied with every convenience, have been opened on this line and its connections, and every attention is paid to their wants. From Harrisburg, where will be found every convenience for feeding and resting, a choice is offered of the PHILADELPHIA, NEW YORK and BALTIMORE MARKETS. This will also be found the shortest, quickest and most direct route for Stock to New York—[via Allentown]—and with fewer changes than any other.

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	DEPART.	ARRIVE
Cincinnati Express.....	7:00 A. M.	9:20 P. M.
Mail and Express.....	8:30 A. M.	6:20 P. M.
Columbus Accommodation.....	4:00 P. M.	11:05 A. M.
Morrow Accommodation.....	6:00 P. M.	8:05 A. M.

Cincinnati Hamilton and Dayton RAILROAD

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE
Dayton and Sandusky Mail.....	7:00 A. M.	6:45 P. M.
Dayton, Toledo and Detroit.....	7:30 A. M.	11:40 P. M.
Cin. & Chicago Air-Line Ex.....	8:00 A. M.	8:50 P. M.
Dayton and Richmond.....	3:45 P. M.	1:50 P. M.
Day, Toledo & Detroit Huntville.....	5:20 P. M.	10:55 A. M.
Cin. & Chicago Air Line Ex.....	7:00 P. M.	8:10 A. M.
Hamilton Accommodation.....	7:00 P. M.	6:50
Eastern Night Express.....	10:00 P. M.	7:10 A. M.

The Eastern Night Express leaves SUNDAY Night in place of Saturday night.

Trains upon Little Miami and Cincinnati and Xenia and Cincinnati, Hamilton & Dayton Railroads run SEVEN MINUTES FASTER than Cincinnati time.

Indianapolis and Cincinnati R.R.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE
Lafayette and Chicago Mail.....	5:00 A. M.	12:20 P. M.
Indianapolis and Terre Haute.....	5:00 A. M.	12:20 P. M.
Decatur, Springfield & Quincy.....	12:45 A. M.	4:45 P. M.
Chicago Night Express.....	5:00 P. M.	10:40 A. M.

Ohio and Mississippi Railroad.

CINCINNATI TO ST. LOUIS.

TWO TRAINS LEAVE CINCINNATI DAILY
For Louisville, Vincennes, Evansville, Cairo, St. Louis
and St. Joseph.

Trains run as follows, SUNDAYS excepted:

	DEPART.	ARRIVE
Louisville and St. Louis Mail.....	6:15 A. M.	10:00 P. M.
Louisville and St. Louis Night Ex.....	7:10 P. M.	7:20 A. M.

One through train for Louisville and St. Louis Sunday evenings.

Trains of the Indianapolis & Cincinnati and the Ohio & Mississippi Railroads run by time TWELVE MINUTES slower than Cincinnati time.

For all information and Through Tickets please apply at the offices: South-east corner of Broadway and Front; North-west corner Third and Vine (Burnet House); and at the respective Depots.

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